EMPLOYMENT SURVEY OF 1985 GRADUATES OF ONTARIO UNIVERSITIES

Report of Major Findings

MARGARET A. DENTON, Principal Investigator
CHRISTINE K. DAVIS
LYNDA HAYWARD
ALFRED A. HUNTER

This research project was jointly funded under contract by the Ministry of Education and the Ministry of Colleges and Universities, Ontario.
It reflects the views of the authors and not necesssarily those of the Ministries.

Sean Conway, Minister
Bernard J. Shapiro, Deputy Minister

The Honourable Gregory Sorbara, Minister
Alan K. Adlington, Deputy Minister

Ministry of Education
Ministry of Colleges and Universities

87-05853/

EMPLOYMENT SURVEY OF 1985 GRADUATES OF ONTARIO UNIVERSITIES

Report of Major Findings

MARGARET A. DENTON, Principal Investigator
CHRISTINE K. DAVIS
LYNDA HAYWARD
ALFRED A. HUNTER

This research project was jointly funded under contract by the Ministry of Education and the Ministry of Colleges and Universities, Ontario.

It reflects the views of the authors and not necesssarily those of the Ministries.

Sean Conway, Minister
Bernard J. Shapiro, Deputy Minister

The Honourable Gregory Sorbara, Minister
Alan K. Adlington, Deputy Minister

© QUEEN'S PRINTER FOR ONTARIO, 1987

Order information:

Publications Sales
The Ontario Institute for
Studies in Education
252 Bloor Street West
Toronto, Ontario
M5S 1V6
(416) 926-4707

Will invoice on orders over $30.00.
Other orders must be accompanied by a
cheque or money order payable to
O.I.S.E.

MGS Publications Services
880 Bay Street, 5th Floor
Toronto, Ontario
M7A 1N8
(416) 965-6015
(Toll Free) 1-800-268-7540
(Toll Free from area code 807)
Ask operator for Zenith 67200.

Order must be accompanied by a cheque
or money order payable to the
Treasurer of Ontario.

Contract 1018
ONO 4231

Canadian Cataloguing in Publication Data

Denton, Margaret A. (Margaret Anne), 1947-
Employment survey of 1985 graduates of Ontario universities, report of major findings

Issued also in French under title: Enquête sur la situation professionnelle de diplômés des universités de l'Ontario, rapport des principales constatations.
Co-published by: Ontario Ministry of Colleges and Universities.
ISBN 0-7729-2540-2

1. College graduates — Employment — Ontario.
I. Ontario. Ministry of Education. II. Ontario. Ministry of Colleges and Universities. III. Title.

HD6278.C32054 1987 331.11'423 C87-099627-4

EMPLOYMENT SURVEY OF 1985 GRADUATES OF ONTARIO UNIVERSITIES

OUTLINE OF REPORT

		Page
ACKNOWLEDGEMENTS		xiv
INTRODUCTION		xv
HIGHLIGHTS		xvii
PURPOSE OF THE SURVEY		xxi
CHAPTER 1	RESEARCH DESIGN AND FIELDWORK PROCEDURES	1
CHAPTER 2	PROFILE OF THE 1985 SPRING GRADUATES	5
2.1	Gender	5
2.2	Age	6
2.3	Parents' Education	8
2.4	Parents' Main Occupation in 1985	11
2.5	Language First Learned to Speak	14
2.6	Level of Degree or Diploma	14
2.7	Major Field of Study	16
2.8	Type of Program	18
2.9	Enrolment Status	19
2.10	Employment Status	20
2.11	Occupation	22
2.12	Industry	28
2.13	Earnings	31
2.14	Job Satisfaction	33
2.15	Migration	35
	Summary and Conclusions	36
CHAPTER 3	SOME SOCIAL AND ECONOMIC FACTORS IN THE EDUCATIONAL AND EARLY CAREER DECISIONS OF THE 1985 SPRING GRADUATES	38
3.1	Level of Degree or Diploma	38
3.1.1	Gender	38
3.1.2	Parents' Education	39
3.1.3	Parents' Main Occupation in 1985	43
3.1.4	Language First Learned to Speak	46
3.2	Major Fields of Study	48
3.2.1	Gender	48
3.2.2	Parents' Education	52
3.2.3	Parents' Main Occupation in 1985	55
3.2.4	Language First Learned to Speak	59

			Page
3.3	Employment Status		61
	3.3.1	Gender	61
	3.3.2	Level of Degree or Diploma	63
	3.3.3	Major Field of Study	67
	3.3.4	Language First Learned to Speak	73
3.4	Occupation		73
	3.4.1	Gender	74
	3.4.2	Level of Degree or Diploma	80
	3.4.3	Major Field of Study	83
	3.4.4	Language First Learned to Speak	86
	3.4.5	Parents' Main Occupation in 1985	89
3.5	Industry		94
	3.5.1	Gender	94
	3.5.2	Level of Degree or Diploma	97
	3.5.3	Major Field of Study	102
	3.5.4	Language First Learned to Speak	107
3.6	Earnings		111
	3.6.1	Gender	111
	3.6.2	Level of Degree or Diploma	114
	3.6.3	Major Field of Study	117
	3.6.4	Language First Learned to Speak	122
	3.6.5	Employment Status	124
	3.6.6	Traditional Students	128
3.7	Overall Job Satisfaction		128
	3.7.1	Gender	128
	3.7.2	Level of Degree or Diploma	129
	3.7.3	Major Field of Study	131
	3.7.4	Employment Status	133
	3.7.5	Language First Learned to Speak	134
3.8	Satisfaction with Selected Aspects of Jobs		135
	3.8.1	Gender	135
	3.8.2	Level of Degree or Diploma	137
	3.8.3	Major Field of Study	140
	3.8.4	Language First Learned to Speak	142
3.9	Migration		143
	3.9.1	Gender	143
	3.9.2	Level of Degree or Diploma	144
	3.9.3	Language First Learned to Speak	147
	Summary and Conclusions		148

		Page
CHAPTER 4	LEVEL OF DEGREE OR DIPLOMA AND MAJOR FIELD OF STUDY AS INTERVENING VARIABLES	152
4.1	Gender, Unemployment, and Salaries	152
4.2	Level of Degree or Diploma, Major Field of Study, Unemployment, and Salaries	158
	Summary and Conclusions	164
CHAPTER 5	GETTING A JOB	166
5.1	Contacts, Interviews, and Offers	166
5.2	Job Search Strategies: Total Respondents	170
5.3	Job Search Strategies: Gender	173
5.4	Job Search Strategies: Level of Degree or Diploma	177
5.5	Job Search Strategies: Major Fields of Study	182
5.6	Further Assistance	188
	Summary and Conclusions	189
CHAPTER 6	EDUCATIONAL QUALIFICATIONS AND JOB REQUIREMENTS	191
6.1	Gender	192
6.2	Level of Degree or Diploma	196
6.3	Major Field of Study	204
6.4	Full- and Part-time Employed	211
	Summary and Conclusions	216
APPENDIX		217
A-1	Schedule of Activities	217
A-2	Questionnaires (English)	219
	(French)	227
A-3	Liaison	235
A-4	Study Population	236
A-5	Questionnaire Finalization	236
A-6	Mailing Procedure	237
A-7	Response Rates	240
A-8	Response Bias	240
A-9	Coding	241
A-10	Data Entry, Editing, and Analysis	243
A-11	Weighting the Data	245

LIST OF TABLES

	Title	Page
1.1	Final Response Rate by Institution	3
1.2	Final Returns on File by Institution	4
2.1	1985 Graduates by Gender	6
2.2	1985 Graduates by Age	7
2.3.a	1985 Graduates by Highest Educational Attainment of Father or Mother	9
2.3.b	Levels of Educational Attainment of 1985 Graduates' Mothers and Fathers and Ontario Females and Males 45-64 Years of Age	10
2.4	1985 Graduates by Main Occupation of Father and Mother in 1985	12,13
2.5	1985 Graduates by Language First Learned to Speak	14
2.6	1985 Graduates by Level of Degree or Diploma	15
2.7	1985 Graduates by USIS Field of Study	16,17
2.8	1985 Graduates by Program	19
2.9	1985 Graduates by Enrolment Status, Spring/Summer 1986	20
2.10	1985 Graduates by Employment Status and Gender, Spring/Summer 1986	21
2.11.a	Full- and Part-Time Employed 1985 Graduates in Each of the Twenty-One Most Common Current Occupations	25,26
2.11.b	Full- and Part-Time Employed 1985 Graduates by Current Occupation, CCDO Major Groups	27,28
2.12	Full- and Part-Time Employed 1985 Graduates by Industry of Current Occupation, SIC Divisions	30
2.13	Full- and Part-Time Employed 1985 Graduates by Level of Annual Income From Current Job	32

	Title	Page
2.14.a	1985 Graduates' Satisfaction with Current Position, Full-time Employed	34
2.14.b	1985 Graduates Very or Quite Satisfied With Selected Aspects of Jobs, Full-time Employed	34
2.15	Full- and Part-time Employed 1985 Graduates by Location of Current Job	35
3.1.1	1985 Graduates by Level of Degree or Diploma and Gender	39
3.1.2	1985 Graduates by Level of Degree or Diploma and Highest Level of Educational Attainment of Mother or Father	41,42
3.1.3.a	1985 Graduates by Level of Degree or Diploma and Father's Main Occupation in 1985	44
3.1.3.b	1985 Graduates by Level of Degree or Diploma and Mother's Main Occupation in 1985	45
3.1.4	1985 Graduates by Level of Degree or Diploma and Language First Learned to Speak	47
3.2.1	1985 Graduates by USIS Field of Study and Gender	49.50
3.2.2	1985 Graduates by Major Field of Study and Highest Level of Educational Attainment of Mother or Father	53,54
3.2.3.a	1985 Graduates by Major Field of Study and Father's Main Occupation in 1985	57
3.2.3.b	1985 Graduates by Major Field of Study and Mother's Main Occupation in 1985	58
3.2.4	1985 Graduates by Major Field of Study and Language First Learned to Speak	60
3.3.1	1985 Graduates by Employment Status and Gender	62
3.3.2	Labour Force Participation and Unemployment Rates for 1985 Spring Graduates by Level of Degree or Diploma, Spring 1986	64
3.3.2.a	1985 Graduates by Level of Degree or Diploma and Employment Status	65
3.3.3	Labour Force Participation and Unemployment Rates for 1985 Spring Graduates by USIS Major Field of Study, Spring/Summer 1986	68,69

	Title	Page
3.3.3.a	1985 Graduates by Major Field of Study and Employment Status	72
3.3.4	1985 Graduates by Employment Status and Language First Learned to Speak	73
3.4.1.a	1985 Graduates by the Twenty-one Most Common Current Occupations and Gender, Full-time Employed	75,76
3.4.1.b	1985 Graduates by Current Occupation, CCDO Major Groups and Gender, Full-time Employed	78,79
3.4.2	1985 Graduates Employed Full-time by CCDO Major Group Occupations and Level of Degree or Diploma	81
3.4.3	1985 Graduates Employed Full-time by CCDO Major Group Occupations and USIS Major Fields of Study	84,85
3.4.4	1985 Graduates by CCDO Major Group Occupations and Language First Learned to Speak, Full-time Employed	88
3.4.5.a	Full-time Employed 1985 Graduates, Occupation, CCDO Major Group by Father's Occupation, CCDO Major Group	90,91
3.4.5.b	Full-time Employed 1985 Graduates, Occupation, CCDO Major Group by Mother's Occupation, CCDO Major Group	92,93
3.5.1.a	1985 Graduates by SIC Division and Gender, Full-time Employed	95,96
3.5.1.b	1985 Graduates by Industry and Gender, Full-time Employed	97
3.5.2.a	1985 Graduates by Level of Degree or Diploma and SIC Division, Full-time Employed	98,99
3.5.2.b	1985 Graduates by Level of Degree or Diploma and Industry, Full-time Employed	101
3.5.3.a	1985 Graduates by USIS Major Field of Study and SIC Division, Full-time Employed	103,104
3.5.3.b	1985 Graduates by USIS Major Field of Study and Industrial Sector, Full-time Employed	106
3.5.4.a	1985 Graduates by SIC Division and Language First Learned to Speak, Full-time Employed	108,109

	Title	Page
3.4.5.b	1985 Graduates by Industrial Sector and Language First Learned to Speak, Full-time Employed	110
3.6.1.a	1985 Graduates by Level of Starting Wage or Salary and Gender, Full-time Employed	112
3.6.1.b	1985 Graduates by Level of Current Wage or Salary and Gender, Full-time Employed	113
3.6.2.a	1985 Graduates by Level of Starting Wage or Salary and Level of Degree or Diploma, Full-time Employed	115
3.6.2.b	1985 Graduates by Level of Current Wage or Salary and Level of Degree or Diploma, Full-time Employed	116
3.6.3.a	1985 Graduates by Level of Starting Wage or Salary and USIS Major Field of Study, Full-time Employed	118
3.6.3.b	1985 Graduates by Level of Current Wage or Salary and USIS Major Field of Study, Full-time Employed	119
3.6.3.c	1985 Graduates by Mean Current Wage or Salary and USIS Major Field of Study, Full-time Employed	120,121
3.6.4.a	1985 Graduates by Level of Starting Wage or Salary and Employment Status and Language First Learned to Speak	123
3.6.4.b	1985 Graduates by Level of Current Wage or Salary and Employment Status and Language First Learned to Speak	124
3.6.5.a	1985 Graduates by Level of Starting Wage or Salary and Employment Status	126
3.6.5.b	1985 Graduates by Level of Current Wage or Salary and Employment Status	127
3.7.1	1985 Graduates' Job Satisfaction and Gender, Full-time Employed	129
3.7.2	1985 Graduates' Satisfaction With Current Position and Level of Degree or Diploma, Full-time Employed	130

	Title	Page
3.7.3	1985 Graduates' Satisfaction With Current Position by USIS Major Field of Study, Full-time Employed	132
3.7.4	1985 Graduates' Satisfaction With Current Position by Employment Status	134
3.7.5	1985 Graduates' Satisfaction With Current Position by Language First Learned to Speak	135
3.8.1	1985 Graduates Very or Quite Satisfied With Selected Aspects of Jobs by Gender, Full-time Employed	137
3.8.2	1985 Graduates Very or Quite Satisfied With Selected Aspects of Jobs by Level of Degree or Diploma, Full-time Employed	139
3.8.3	1985 Graduates Very or Quite Satisfied With Selected Aspects of Jobs by USIS Major Field of Study, Full-time Employed	141
3.8.4	1985 Graduates Very or Quite Satisfied With Selected Aspects of Jobs by Language First Learned to Speak	142
3.9.1	1985 Graduates by Gender and Location of Current Job, Full-time Employed	144
3.9.2	1985 Graduates by Level of Degree or Diploma and Location of Current Job, Full-time Employed	146
3.9.3	1985 Graduates by Language First Learned to Speak and Location of Current Job, Full-time Employed	147
4.1.a	1985 Unemployment Rates by Gender and Level of Degree or Diploma	153
4.1.b	1985 Unemployment Rates by Gender and USIS Major Field of Study	154
4.1.c	Mean Current Salary for 1985 Full-time Employed Graduates, by Level of Degree or Diploma, by Gender	155
4.1.d	Mean Current Salary for 1985 Full-time Employed Graduates, by USIS Major Field of Study, by Gender	157
4.2.a	1985 Unemployment Rates by USIS Major Field of Study and Level of Degree or Diploma	160

	Title	Page
4.2.b	Mean Current Salary by USIS Major Field of Study and Level of Degree or Diploma, Full-time Employed	163
5.1.a	1985 Graduates by Number of Initial Contacts with Different Potential Employers	167
5.1.b	1985 Graduates by Number of Job Interviews Resulting from Initial Contacts with Different Potential Employers	168
5.1.c	1985 Graduates by Number of Job Offers	169
5.2.a	Percentages of the 1985 Graduates Pursuing Selected Job Search Strategies	172
5.2.b	Percentages of 1985 Graduates Using Selected Strategies Who Received Job Offers by that Means	173
5.3.a	Percentages of the 1985 Graduates Pursuing Selected Job Search Strategies, by Gender	175
5.3.b	Percentages of the 1985 Graduates Pursuing Selected Strategies Who Received Job Offers by that Means, by Gender	176
5.4.a	Percentages of the 1985 Graduates Pursuing Selected Job Search Strategies by Level of Degree or Diploma	178
5.4.b	Percentage of the 1985 Graduates Pursuing Selected Job Search Strategies Who Received Job Offers by that Means, by Level of Degree or Diploma	180
5.5.a	Percentage of the 1985 Graduates Pursuing Selected Job Search Strategies by USIS Major Field of Study	184
5.5.b	Percentage of the 1985 Graduates Pursuing Selected Job Search Strategies who Received Job Offers by that Means, by USIS Major Field of Study	186
5.6	1985 Graduates Indicating More Assistance is Required in Several Sources of Assistance in the Job Search	189
6.1.a	1985 Graduates by Gender and Relationship of Job in General Skills to Major Field of Study, Full-time Employed	193

	Title	Page
6.1.b	1985 Graduates by Gender and Relationship of Job in Program Content to Major Field of Study, Full-time Employed	194
6.1.c	1985 Graduates by Gender and the Educational Requirements of the Most Recent Job, Full-time Employed	195
6.1.d	1985 Graduates by Gender and the Articulation of Level of Degree or Diploma Attained and Required or Preferred by the Employers, Full-time Employed	195
6.1.e	1985 Graduates by Gender and the Articulation of Major Field of Study Attained and Required or Preferred by the Employer, Full-time Employed	196
6.2.a	1985 Graduates by Level of Degree or Diploma and Relationship of Job in General Skills to Major Field of Study, Full-time Employed	199
6.2.b	1985 Graduates by Level of Degree or Diploma and Relationship of Job in Program Content to Major Field of Study, Full-time Employed	200
6.2.c	1985 Graduates by Level of Degree or Diploma and the Educational Requirements of the Most Recent Job, Full-time Employed	201
6.2.d	1985 Graduates by Level of Degree or Diploma and the Articulation of Level of Degree or Diploma Attained and Required or Preferred by the Employer, Full-time Employed	202
6.2.e	1985 Graduates by Level of Degree or Diploma and the Articulation of Major Field of Study Attained and Required or Preferred by the Employer, Full-time Employed	203
6.3.a	1985 Graduates by USIS Major Field of Study and Relationship of Job in General Skills to Major Field of Study, Full-time Employed	206
6.3.b	1985 Graduates by USIS Major Field of Study and Relationship of Job in Program Content to Major Field of Study, Full-time Employed	207
6.3.c	1985 Graduates by USIS Major Field of Study and the Educational Requirements of the Most Recent Job, Full-time Employed	208

	Title	Page
6.3.d	1985 Graduates by USIS Major Field of Study and the Articulation of the Level of Degree or Diploma Attained and Required or Preferred by the Employer, Full-time Employed	209
6.3.e	1985 Graduates by USIS Major Field of Study and Articulation of Major Field of Study Attained by Job Requirements or Preferred by the Employer, Full-time Employed	210
6.4.a	1985 Graduates by Employment Status and Relationship of Job in General Skills to Major Field of Study	212
6.4.b	1985 Graduates by Employment Status and Relationship of Job in Program Content to Major Field of Study	213
6.4.c	1985 Graduates by Employment Status and the Educational Requirements of the Most Recent Job	214
6.4.d	1985 Graduates and Employment Status and the Articulation of Major Field of Study Attained and Required or Preferred by the Employer	215
6.4.e	1985 Graduates and Employment Status and the Articulation of Level of Degree or Diploma Attained and Required or Preferred by the Employer	215
A-1	Schedule of Activities	217

ACKNOWLEDGEMENTS

The 1985 Ontario graduate employment survey involved the combined efforts of many people, and the authors of this report wish to acknowledge their help. In particular, we wish to thank Elizabeth Sands, Jackie Creber, Doug MacDonald, and Mafat Patel from the Ministry of Colleges and Universities and Ken Towsley from the Ministry of Education for their assistance throughout the project.

We also wish to thank Margaret Knott, Kamla Krill, Jennifer Oliphant, Brenda Nussey, and Beverley Parr from Social Data Research Limited, whose combined research and clerical expertise was crucial to the success of this study.

In addition, we are grateful for the co-operation and helpful comments from many interested university officials. Finally, we are thankful to the many 1985 Ontario graduates who took the time to complete the questionnaire.

INTRODUCTION

This report describes the procedures involved in and some selected results from the 1985 Ontario Graduate Employment Survey in which a questionnaire was mailed to all spring graduates of the fifteen Ontario universities, the Ontario College of Art, and Ryerson Polytechnical Institute. The 1985 survey is a replication of the 1979 and 1982 surveys of spring graduates and is intended to provide information on the postgraduate educational and labour market experiences of the 1985 graduates within a year of their graduation. Selected comparisons of the 1985 survey results to the 1979 and 1982 survey results are made throughout the report.

Chapter 1 describes the fieldwork procedures employed, the nature of the survey instrument used, and the response rates achieved. Chapter 2 gives a profile of the 1985 spring graduates in terms of selected demographic and social-background variables, aspects of their educational experiences, and features of their early career paths. Chapter 3 relates these demographic and social-background factors, along with aspects of the graduates' educational experiences, to the graduates' subsequent educational or early career choices. Chapter 4 takes some of the major findings from the previous chapters and examines them more closely by introducing some additional variables into the analysis. Chapter 5 presents an analysis of the means by which employed graduates obtained their jobs. Finally, Chapter 6 brings data from the survey to bear on the issue of the

relationship between the kind and amount of the graduates' educational experiences and the educational requirements of their jobs.

HIGHLIGHTS

Some of the highlights of the analysis of the data gathered on 1985 spring graduates from Ontario universities are presented below.

Findings From Chapter 2: A Profile of the 1985 Spring Graduates

- Slightly more women than men graduate from university-level institutions in Ontario (54.9%).
- The parents of university-level graduates are better educated on the average than are Ontario adults aged 45-64.
- 1985 graduates' fathers are more likely than Ontario males aged 45-64 as a whole to be employed in managerial, administrative and related (21.2%); natural sciences, engineering and mathematics (9.3%); and sales (7.7%) occupations. 1985 graduates' mothers are more likely to be employed in clerical and related (31.7%); teaching and related (12.3%); and medicine and health (12.0%) occupations.
- 81.0 per cent of 1985 graduates were in the labour force in the spring of 1986.
- The unemployment rate among the 1985 graduates in the spring of 1986 was 7.3 per cent.
- 18.3 per cent of 1985 spring graduates continued their education as full-time students.
- 52.7 per cent of employed 1985 graduates are employed in just twenty-one different occupations.

Findings From Chapter 3: Some Social and Economic Factors in the Educational and Early Career Decisions of the 1985 Spring Graduates

- Proportionately more women are holders of three-year bachelor's degrees and one-year Bachelor of Education degrees, while proportionately more men are holders of diplomas, four-year bachelor's, first professional, master's, and doctoral degrees.

- Proportionately more women graduated in the fields of education, physical education, recreation and leisure, fine and applied arts, humanities, social sciences, and health professions and occupations and proportionately more men graduated in the fields of commerce and business administration, engineering and applied sciences, and mathematics and physical sciences.

- The unemployment rate among 1985 graduates in the spring of 1986 was about the same for women (7.7 per cent) as for men (7.1 per cent).

- Male graduates have both higher starting and higher current full-time salaries than female graduates.

- Graduates with first professional, master's, and doctoral degrees have proportionately higher rates of labour force participation than do holders of three- or four-year bachelor's degrees or diplomas. Graduates with diplomas, four-year bachelor's degrees, first professional degrees, and master's degrees have lower unemployment rates than holders of three-year bachelor's degrees, Bachelor of Education degrees or doctoral degrees.

- Current average salary varies across level of degree or diploma such that the higher the level of degree or diploma, the higher the earnings.

- Holders of diplomas and three-year bachelor's degrees are less satisfied with their jobs overall than the other graduates, while holders of one-year Bachelor of Education, first professional, master's, and doctoral degrees are all above average in overall job satisfaction.

- Graduates in health professions and occupations and commerce and business administration have higher rates of labour force participation and lower rates of unemployment than do graduates in other fields of study.

- Current average full-time salary varies across fields of study. Those fields which are characterized by above-average salaries are: health professions and occupations, engineering and applied sciences, mathematics and physical sciences, education, physical education, recreation and leisure, and commerce and business administration.

- Job satisfaction varies across major fields of study, with those in the health professions and occupations and education, physical education, recreation and leisure reporting higher than average levels of overall job satisfaction.

- There is some evidence among the population of the university educated to suggest that people's social backgrounds, in terms of their parents' education or main occupation, systematically influence their educational choices or achievements.

- To the extent that there is migration out of Ontario among graduates, those who move do not seem generally to differ in terms of their educational qualifications from those who do not, although holders of doctoral degrees are somewhat more likely to leave than are other graduates.

Findings From Chapter 4: Level of Degree or Diploma and Major Field of Study as Intervening Variables

- Across all degree levels and fields of study, male 1985 graduates earned more, on average, than female graduates did.

- The male and female unemployment rates varied by field of study and level of degree. In particular, rates of unemployment for female Ph.D. graduates were almost three times higher than male Ph.D. graduates (15.3% vs 5.9%).

- The relationship between level of degree and unemployment and earnings was not explained by the introduction of field of study as an intervening variable.

Findings From Chapter 5: Getting a Job

- o 1985 graduates employed several different job search strategies, however, the most successful was assistance from co-operative or internship employers and friends or relatives.

- o Male graduates in 1985 who used on-campus placement services or co-operative or internship employers as sources of assistance were more successful than women who did so; while women who used private agencies or who made walk-in contacts with prospective employers fared much better than men who did so.

- o Large numbers of the 1985 graduates reported that they could have used several kinds of further assistance in their job searches, especially with respect to obtaining actual job leads, developing interview skills, and using job search techniques.

Findings From Chapter 6: Educational Qualifications and Job Requirements

- o 1985 graduates with one-year Bachelor of Education degrees or first professional degrees stood out among those whose qualifications seemed to closely relate to their jobs, and holders of three-year bachelor's degrees ranked relatively low in this regard.

- o 1985 graduates in the health professions and occupations and those in applied sciences and engineering reported more than others that their jobs met their educational qualifications.

PURPOSE OF THE SURVEY

The 1985 Ontario Graduate Employment Survey gathered data on certain demographic and social-background characteristics for spring graduates along with information on their degree or diploma levels, major fields of study, types of programs, decisions to further their education, job search procedures and experiences, employment status, initial and subsequent occupational choices, educational requirements of jobs, starting salaries, job satisfaction, and migration. These data are designed for several uses. First, they provide information for policy makers on current concerns with regard to postsecondary education in Ontario and, when employed in tandem with findings from previous surveys, on trends related to education. Second, they are a source of basic statistical data for the universities, other Ontario ministries, Statistics Canada, and researchers. Third, they are potentially useful to those involved in career-counselling and student placement in the universities, colleges of applied arts and technology, and secondary schools.

CHAPTER 1 RESEARCH DESIGN AND FIELDWORK PROCEDURES

The 1985 Ontario Graduate Employment Survey is the third in a series of studies conducted for the Ministry of Colleges and Universities to monitor the employment experiences of its most recent graduates from universities, the Ontario College of Art, and Ryerson Polytechnical Institute. The first survey was conducted in 1979; the second followed three years later in 1982. The 1985 survey replicates the 1982 survey and, to some extent, the 1979 survey in terms of research design, fieldwork procedures, information obtained and analysis completed.

A detailed description of the methodology used in this study, including a schedule of events, liaison activities, study population, questionnaire design, mailing procedure, response rates, coding, data entry, editing, analysis, and sample weighting procedures, as well as a copy of all study-related materials can be found in the Appendix, A-1 to A-11. An overview of the above is presented here.

The 1985 Ontario Graduate Employment Survey was carried out over a period of nine months, beginning in April 1986 (see Appendix A-1 for a detailed schedule of events). Except for a few changes, the questionnaire was almost identical to the instrument used in 1982. The most significant change made to the questionnaire was the addition of a series of questions on parents' occupation (see Appendix A-2).

The questionnaire was mailed to all 1985 spring graduates (visa students excluded) of the seventeen institutions (N = 36, 315). After three follow-ups, including a telephone survey of non-respondents from institutions with response rates below 50 per cent, an overall response rate, adjusted[1] (for non-deliverables), of 56.9 per cent was achieved. This rate was within the expected range of between 55 per cent and 60 per cent and similar to the response rate in 1982.

The overall and individual institutions' response rates are given in Table 1.1 and the final number of returns on file (after coding and data entry), are presented in Table 1.2. As was the case in the 1982 study, the data were weighted in the analysis to adjust for differential response rates by institution (see Appendix, A-3 to A-11).

---

[1] Total returns = total mailing - total non-deliverables.

TABLE 1.1

Final Response Rate by Institution

Institution	Total Mailing	Total Non-Deliverables	Total Returns[a]	Unadjusted Response Rate	Adjusted Response Rate
Brock	1024	123[b]	570	55.7	63.3
Carleton	1436	229	706	49.2	58.5
Guelph	1413	52	824	58.3	60.5
Lakehead	873	35	490	56.1	58.5
Laurentian	968	87	520	53.7	59.0
McMaster	1574	88	861	54.7	57.9
OCA	248	66	121	48.8	66.5
Ottawa	2949	289	1420	48.2	53.4
Queen's	2830	181	1599	56.5	60.4
Ryerson	2034	116	1056	51.9	55.1
Toronto	7026	580	3471	49.4	53.8
Trent	645	70	341	52.9	59.3
Waterloo	2876	?[e]	1544	53.7	53.7[c]
Western	4518	217	2607	57.7	60.6
WLU	945	49	562	59.5	62.7
Windsor	1557	115	843	54.1	58.5
York	3399	235	1607	47.3	50.8
Unidentified	-	-	2	-	-
Total	36315	2532	19144	52.7	56.9[d]

a. Includes telephone responses.
b. Estimated in proportion to returns.
c. Adjusted rate not available for University of Waterloo.
d. Calculation excludes University of Waterloo.
e. University of Waterloo did not keep track of their non-deliverables.

TABLE 1.2

Final Returns on File by Institution

Institution	Total Returns	Ineligible[a]	Refusals/ Spoiled	Total Coded and on Final File
Brock	570	55	-	515
Carleton	706	39	6	661
Guelph	824	24	3	797
Lakehead	490	17	2	471
Laurentian	520	50	1	469
McMaster	861	53	2	826
OCA	121	6	5	110
Ottawa	1420	180	13	1227
Queen's	1599	65	3	1531
Ryerson	1056	88	2	966
Toronto	3471	197	8	3266
Trent	341	25	2	314
Waterloo	1544	60	2	1482
Western	2607	124	1	2482
WLU	562	19	-	543
Windsor	843	56	1	786
York	1607	171	8	1428
Unidentified	2	1	-	1
Total	19144	1210	59	17875

a. Includes visa students; out of country; wrong completion year or graduation year; fall graduates.

CHAPTER 2 PROFILE OF THE 1985 SPRING GRADUATES

The following six chapters present some basic findings from the 1985 Ontario Graduate Employment Survey. This chapter provides a profile of the respondents in terms of selected demographic and social-background characteristics, aspects of their educational experiences, and features of their early career paths. Chapter 3 presents some analyses of certain relationships between these demographic, social-background, and educational factors, on the one hand, and subsequent educational and early career choices and achievements, on the other. Chapter 4 shows how demography, social background, and aspects of the respondents' training and credentials operated in combination to shape and condition their early career trajectories. Chapter 5 analyses the processes by which the respondents sought employment. Finally, Chapter 6 examines the relationships between the respondents' educational experiences and the educational requirements of their jobs. Considered along with information from other sources, including the 1979 and 1982 surveys, the data give a glimpse of certain short-run changes in that system.

2.1 Gender

A small majority (54.9 per cent) of the respondents in the 1985 survey were female, as Table 2.1 shows. The percentage of 1985 female graduates is up slightly from the figure for the 1982 survey (52.3 per cent) and the 1979 survey (49.8 per cent). These percentages are slightly higher than those reported by

Statistics Canada[2] for the same time period, however, the pattern is similar and would confirm a trend towards the greater participation of women at university-level institutions in Ontario.

TABLE 2.1

1985 Graduates by Gender

	Percentage[a]
Male	45.1
Female	54.9
Total	100.0
Weighted N[3]	33262

a. Percentages may sum to other than 100.0 due to rounding.

2.2 Age

Canadians who undertake university-level education typically do so as a direct continuation of their secondary-school training. This means that the bulk of Canadians who continue their studies at the university level begin in their late teenage years and finish in their early twenties. In the 1985 survey,

2 Statistics Canada USIS data supplied by Ministry of Colleges and Universities for graduating years corresponding to surveys.

3 The data is adjusted for the differential rates of response across institutions.

approximately 62 per cent of the respondents fell into this category. This percentage is down slightly from the corresponding figures for the 1982 and 1979 respondents (i.e., 65 per cent in each case).

TABLE 2.2

1985 Graduates by Age

Age	Percentage[a]
15 - 19	-[b]
20 - 24	61.9
25 - 29	22.8
30 - 34	6.3
35 - 39	3.9
40 - 44	2.5
45 - 49	1.3
50 - 54	0.6
55 - 59	0.3
60 +	0.2
Total	100.0
Weighted N	36209

a. Percentages may sum to other than 100.0 due to rounding.

b. Less than 0.1 per cent.

2.3 Parents' Education

Table 2.3.a shows that 22.1 per cent of the respondents came from families in which neither parent completed secondary school, and that 30.3 per cent came from families in which at least one parent had completed a bachelor's degree or higher. Similar figures were shown for the 1982 graduates. Since this information was not sought in the 1979 survey, it is not possible to comment upon what changes might have occurred in this regard in the 1979-85 period.

TABLE 2.3.a

1985 Graduates by Highest Level of Educational Attainment of Father or Mother[a]

Highest Level of Education of Father or Mother	Percentage[b]
No formal schooling (self-taught)	0.4
Some elementary schooling	5.4
Completed elementary schooling	5.4
Some secondary schooling	10.9
Secondary school graduation certificate	14.8
Apprenticeship or journeyman	6.3
Non-university certificate or diploma	8.3
Professional certification	9.8
Some university experience	6.7
Bachelor's degree	16.6
Degree in medicine, dentistry, or other professional program	3.3
Master's degree	7.1
Earned doctorate	3.3
Other	1.8
Total	100.0
Weighted N	35175

a. Parent with highest educational level recorded.

b. Percentages may sum to other than 100.0 due to rounding.

TABLE 2.3.b

Levels of Educational Attainment of 1985 Graduates' Mothers and Fathers and Ontario Females and Males 45-64 Years of Age

Level of Educational Attainment	Percentage[a]			
	Graduates' Mothers	Ontario Women 45-64[b]	Graduates' Fathers	Ontario Men 45-64[b]
Less than secondary school completion	33.8	58.9	33.5	61.0
Secondary school graduation certificate	24.2	11.3	12.8	6.9
Other	28.9	25.8	26.4	22.4
Bachelor's degree or higher	13.2	4.0	27.1	9.7
Total	100.0	100.0	100.0	100.0
Weighted N	35288		35175	

a. Percentages may sum to other than 100.0 due to rounding.

b. Unpublished data, 1981 Census, Statistics Canada.

Comparing educational background of the graduates' parents with Ontario men and women in the same general age category reveals that the parents of 1985 graduates are better educated on the average. For example, according to the 1981 Census, 67.9 per cent of Ontario males aged 45-64 had secondary school graduation or lower and 9.7 per cent of this group had a bachelor's degree or higher. For the 1985 graduates, however, 46.3 per cent of their fathers had secondary school graduation or lower and 27.1 per cent had a bachelor's degree or higher.

2.4 Parents' Main Occupation in 1985

Table 2.4 shows the main occupations in 1985 of the graduates' fathers and mothers. The table also shows the 1981 occupations for men and women, aged 45-64 in Ontario. Occupations are grouped into the major groups of the Canadian Classification and Dictionary of Occupations (CCDO) -- the occupational-classification scheme most widely used in Government of Canada publications. These data show that those 1985 graduates' fathers and mothers who were in the labour force were more likely than men and women aged 45-64 generally, to be employed in managerial, administrative, and related occupations, natural sciences, engineering, and mathematics occupations (fathers only) social sciences and related occupations, teaching and related occupations, and medicine and health occupations, and less likely to be employed in other occupations.

About 48 per cent of 1985 graduates' mothers were in the labour force in the spring of 1985. This compares to 53 per cent of women, aged 45-64 generally in Ontario.[4]

---

4 Average of May and June labour force participation rate obtained from Statistics Canada, The Labour Force, May & June 1986, Catalogue 71-001, Vol. 42., No. 5 & 6, Ottawa: June & July, 1986.

TABLE 2.4

1985 Graduates by Main Occupation of Father and Mother in 1985

Main Occupation in 1985	Percentage[a]			
	Graduate's Father	Ontario Men 45-64[b]	Graduate's Mother	Ontario Women 45-64[b]
Managerial, administrative, and related	21.2	15.2	7.6	6.3
Natural sciences, engineering, and mathematics	9.3	4.7	0.5	0.5
Social sciences and related	3.0	1.1	4.5	2.0
Religion	1.0	0.5	0.2	0.2
Teaching and related	7.2	2.6	12.3	4.7
Medicine and health	4.8	1.6	12.0	7.4
Artistic, literary, performing arts, and related	1.1	1.0	1.6	0.9
Sport and recreation	0.1	0.2	0.2	0.1
Clerical and related	3.1	6.6	31.7	34.5
Sales	7.7	8.1	9.4	11.1
Service	5.0	9.2	6.7	15.9
Farming, horticultural, and animal-husbandry	2.8	4.3	1.5	2.5
Fishing, hunting, trapping, and related	0.1	-[c]	0.0	-[c]
Forestry and logging	0.1	0.3	-[c]	-[c]

TABLE 2.4 (con't)

1985 Graduates by Main Occupation of Father and Mother in 1985

Main Occupation in 1985	Percentage[a]			
	Graduate's Father	Ontario Men 45-64[b]	Graduate's Mother	Ontario Women 45-64[b]
Mining & quarrying	0.4	0.7	-[c]	-[c]
Processing	3.0	5.0	1.3	2.4
Machining and related	2.3	5.2	0.1	0.9
Product fabricating, assembling, and repairing	6.6	10.9	4.5	6.6
Construction trades	7.6	10.2	0.3	0.2
Transport-equipment operating	1.9	5.9	0.4	0.6
Material-handling and related	0.9	2.6	0.4	1.8
Other crafts and equipment-operating	1.6	2.0	0.2	0.7
Other occupations	0.5	2.1	4.6	0.7
Total	100.0	100.0	100.0	100.0
Weighted N	24767	749510	16110	446836

a. Percentages may sum to other than 100.0 due to rounding.

b. Statistics Canada, 1981 Census of Canada "Population. Economic Characteristics, Ontario", Catalogue 93-966, Ottawa: May, 1984.

c. Less than 0.1 per cent

2.5 Language First Learned to Speak

Close to 80 per cent of the 1985 spring graduates learned English as their first language and 6.1 per cent of the graduates learned French first. However, 14.4 per cent of graduates used a language other than French or English as their first language.

TABLE 2.5

1985 Graduates by Language First Learned to Speak

Language First Learned to Speak	Percentage[a] Language
English	79.4
French	6.1
Other	14.4
Weighted N	36089

a. Percentages may sum to other than 100.0 due to rounding.

2.6 Level of Degree or Diploma

Table 2.6 shows the distributions of the 1985 graduates across levels of degree or diploma. These data indicate that 24.5 per cent of graduates earned three-year bachelor's degrees, 46.4 per cent earned four-year bachelor's degrees, 5.0 per cent earned professional degrees, and 10.1 per cent earned either master's or doctoral degrees. When compared with the corresponding data from the 1982 and 1979 survey, there is

evidence of a change since 1979 in the Ontario system of post-secondary, university-level education. First, there has been a shift towards four-year bachelor's degrees, along with movement away from three-year bachelor's degrees and master's degrees. Second, a slight increase in the representation of professional degrees can also be seen, as well as a small decrease in the representation of doctoral degrees since 1979.

TABLE 2.6

1985 Graduates by Level of Degree or Diploma

Level of Degree or Diploma	Percentage[a]
Diploma/Certificate	4.7
Bachelor's - three-year	24.5
Bachelor's - four-year (including four-year B.Ed.)	46.4
Bachelor of Education (one-year only)	8.9
First Professional (MD, DDS, LLB, LLL, OD, DVM)	5.0
Master's	9.3
Ph.D.	0.8
Other[b]	0.2
Total	100.0
Weighted N	36299

a. Percentages may sum to other than 100.0 due to rounding.

b. Category "Other" includes those with graduate diplomas, professional engineers, and associates with the OCA.

2.7 Major Field of Study

Table 2.7 presents the distribution of the 1982 respondents across University Students Information System (USIS) fields of study and shows that the largest number of respondents graduated from social sciences (24.5 per cent), while the fewest came from fine and applied arts (3.2 per cent). In general, a comparison of these data with those from 1982 and 1979 shows only small changes. Since 1979, there has been an increase in the representation of spring graduates in commerce and business administration. Since 1982, the number of mathematics and physical sciences graduates has increased by about two per cent.

TABLE 2.7

1985 Graduates by USIS Field of Study

Major Field	Percentage[a]
EDUCATION & GENERAL ARTS	15.9
General Arts	0.7
Elementary/Secondary Teacher Training	11.6
Non-Teaching Field	0.7
Physical Education	2.7
Education N.E.C.[b]	2.2
FINE & APPLIED ARTS	3.2
Music	0.8
Applied Arts	1.0
Fine & Applied Arts N.E.C.	1.4
HUMANITIES	11.7
English Language and/or Literature	3.4
French Language and/or Literature	1.5
History	2.1
Mass Media Studies (including journalism)	1.6
Religious & Theological Studies	1.0
Humanities N.E.C.	2.1

TABLE 2.7 (con't)

Major Field	Percentage[a]
SOCIAL SCIENCES	24.5
Economics	3.8
Geography	2.1
Law & Jurisprudence	2.8
Political Science	2.6
Psychology	6.3
Social Work & Social Welfare	1.6
Sociology	2.7
Social Sciences N.E.C.	2.6
COMMERCE, MANAGEMENT & BUSINESS ADMINISTRATION	13.3
AGRICULTURE & BIOLOGICAL SCIENCES	6.5
Agriculture	0.9
Biology	2.9
Household Science	0.8
Agriculture & Biological Sciences N.E.C.	1.9
ENGINEERING & APPLIED SCIENCE	9.9
Chemical Engineering	1.2
Civil Engineering	1.3
Electrical Engineering	2.1
Mechanical Engineering	2.4
Other Engineering	1.8
Engineering & Applied Sciences N.E.C.	1.1
HEALTH PROFESSIONS	6.4
Dental Studies & Research	0.5
Medical Studies & Research	1.9
Nursing	2.0
Pharmacy	0.5
Rehabilitation Medicine	1.0
Health Professions N.E.C.	0.4
MATHEMATICS & PHYSICAL SCIENCES	8.5
Computer Science	3.2
Mathematics	2.1
Chemistry	1.1
Geology & Related	1.3
Physics	0.7
Mathematics & Physical Sciences N.E.C.	0.1
TOTAL	100.0
Weighted N	36248

a. Percentages may sum to other than 100.0 due to rounding.
b. Not elsewhere classified.

Table 2.7 also shows the distribution of the 1985 respondents across detailed (USIS) fields of study. The detailed fields permit us to see, for example, that, among the social sciences, more respondents graduated from psychology (6.3 per cent), followed by economics (3.8 per cent) than any of the other social sciences. Also, within the field of mathematics and physical sciences, more 1985 graduates had majored in computer science (3.2 per cent) than in any of the other mathematics or physical science fields.

2.8 Type of Program

The distribution of the 1985 spring graduates in terms of type of program is shown in Table 2.8. Some 82.9 per cent of graduates completed their courses of study in regular programs, 4.7 per cent in co-operative programs, and 11.3 per cent in regular programs which required some kind of work experience or internship. These findings are virtually the same as for the 1982 and 1979 graduates.

TABLE 2.8

1985 Graduates by Program

Program	Percentage[a]
Regular	82.9
Co-operative	4.7
Regular which required work experience and/or internship	11.3
Other	1.1
Total	100.0
Weighted N	35745

a. Percentages may sum to other than 100.0 due to rounding.

2.9 Enrolment Status

The distribution of the 1985 respondents in terms of their enrolment status is shown in Table 2.9. Some 81.9 per cent of the graduates in that year completed their program of study as full-time students only, 7.4 per cent of the graduates did so either as part-time or extension students only, and the remainder combined full-time enrolment with either part-time or extension status. A comparison of these data with those for the 1982 and 1979 graduates shows the percentages of full-time, part-time and combined full-time/part-time graduates have fluctuated only slightly from year to year.

TABLE 2.9
1985 Graduates by Enrolment Status, Spring/Summer 1986

Enrolmert Status	Percentage[a]
Full-time only	81.9
Part-time/extension only	7.4
Both full-time and part-time/extension	10.5
Other	0.2
Total	100.0
Weighted N	35485

a. Percentages may sum to other than 100.0 due to rounding.

2.10 Employment Status

Table 2.10 shows the distribution of the 1985 respondents across a set of categories of employment status at the time of the survey. These data indicate that the labour force participation rate[5] of 1985 graduates in the spring/summer of 1986 was 81.0 per cent, with 19.0 per cent of graduates not in the labour force. Calculating the number of unemployed as a percentage of the labour force yields an unemployment rate of 7.3 per cent in the spring/summer of 1986. This compares with an unemployment rate for 1986 of 7.0 per cent for the total labour

5 According to the conventions adopted for Statistics Canada's monthly Labour Force Survey, the labour force includes those who are employed either full- or part-time and those who are not employed but are available for work. The participation rate for a particular group (graduates) is the labour force in that group expressed as a percentage of the population for that group. The unemployment rate is the percentage of the labour force who are unemployed but available for work.

force in Ontario and a rate of 10.5 per cent for Ontarians aged 20-24[6].

TABLE 2.10

1985 Graduates by Employment Status[a] and Gender, Spring/Summer 1986

Employment Status	Percentage[b]		
	Gender		
	Males	Females	Total
Percentage of graduates in labour force	81.4	80.7	81.0
Percentage of graduates out of labour force	18.6	19.3	19.0
Weighted N	16326	19905	36285
Of those in the labour force:			
Employed on a full-time basis	84.6	76.4	80.1
Employed on a part-time basis	8.4	16.9	12.6
Not employed but waiting for a job to start or awaiting recall	1.5	2.2	1.9
Not employed but looking for employment	5.4	5.3	5.4
Total in labour force	100.0	100.0	100.0
Weighted N	13288	16060	29347

a. Calculations match the methodology used in the Labour Force Survey.

b. Percentages may sum to other than 100.0 due to rounding.

6 Average unemployment rate obtained from Statistics Canada, The Labour Force, December 1986, Catalogue 71-001, Vol. 42., No. 12, Ottawa: January, 1987.

At the time of the survey, 18.3 per cent of all 1985 graduates reported that they were full-time students. This calculation includes graduates who reported that they were both full-time students and in the labour force.

Comparisons with the data for the 1982 and 1979 graduates show that the employment status of the 1985 graduates more closely resembles the experiences of the 1979 than of the 1982 graduates. The 1982 graduates had a labour force participation rate of 84.3 per cent and an unemployment rate of 11.1 per cent in the spring of 1983, reflecting the effect of the recession on the labour force during that period. This compared to an unemployment rate for spring, 1983 of 18.7 per cent for Ontarians aged 20-24. The 1979 graduates had a labour force participation rate of 79.5 per cent in the spring of 1980. The unemployment rate was 5.8 per cent for graduates compared with 10.7 per cent for Ontarians aged 20-24[7].

2.11 Occupation

Table 2.11.a shows the twenty-one most common occupations found among the 1985 graduates which, collectively, account for 52.7 per cent of all those currently employed. The most common occupation is that of computer programmer, which represents 6.4 per cent of the employed graduates, followed, in turn, by accountants, auditors, and other financial officers (5.7 per

---

[7] The participation and unemployment rates for the 1979 graduates have been recalculated to match the methodology used in this report and in the Labour Force Survey. Articling lawyers and medical interns are included in the labour force.

cent) and elementary and kindergarten teachers (5.6 per cent) and secondary school teachers (3.2 per cent). Over the three-year period, 1983-86, the percentages of graduates employed in the twenty-one most common current occupations increased by 1 per cent. Table 2.11.a also indicates that proportionately more part-time than full-time workers are employed as supply teachers and sales clerks or in occupations in welfare and community services.

Comparisons of the employment situations of the 1985 and 1982 graduates indicate a number of changes in the percentages of graduates in certain occupations. First, the percentage of recent graduates employed as computer programmers has increased by 2.4 per cent since 1983. Second, the percentage of graduates employed as accountants, auditors, and other financial officers has decreased by almost two per cent. Third, the percentages of graduates employed in occupations related to management and administration, social work, and occupations in welfare and community services have all increased. Fourth, the percentage of graduates employed as teachers unspecified, university teachers or research assistants (i.e., not professors) has decreased slightly. Fifth, four occupations were added to the list for 1985 of the twenty-one most common and four were dropped. Added were bookkeepers and accounting clerks, sales clerks, commercial travellers, and writers and editors. Dropped were civil engineers, other university teachers or research assistants, teachers of exceptional students and salesmen and salespersons, commodities (n.e.c.). Occupations were not coded at this level

of detail in the 1979 survey, so that no comparisons are possible among the three surveys using individual occupations.

TABLE 2.11.a
Full- and Part-Time Employed 1985 Graduates in Each of the Twenty-One Most Common Current Occupations

Occupation (CCDO)	Percentage		
	Total	Full-time	Part-time
Computer programmers (2183)	6.4	7.3	0.7
Accountants, auditors, and other fin. officers (1171)	5.7	6.4	0.7
Elementary and kindergarten teachers (2731)	5.6	5.7	5.0
Secondary teachers (2733)	3.2	3.2	3.3
Occupations related to management and administration (n.e.c.) (1179)	2.9	3.1	1.3
Lawyers and notaries (2343)	2.8	3.1	0.2
Nurses, graduate (except supervisors) (3131)	2.5	2.5	3.1
Teachers, unspecified (2730)	2.3	2.2	2.7
Supply teachers (2700)	2.2	0.4	14.6
Physicians and surgeons (3111)	2.1	2.4	0.2
Occupations in welfare and community services (2333)	2.1	1.9	3.5
Electrical engineers (2144)	1.9	2.2	0.1
Social workers (2331)	1.9	2.0	1.4
Secretaries and stenographers (4111)	1.6	1.6	2.2
Mechanical engineers (2147)	1.6	1.8	-
Bookkeepers and accounting clerks (4131)	1.5	1.5	1.3
Sales clerks, commodities (5137)	1.4	0.6	6.8
Physiotherapists, occup. and other therapists (3137)	1.3	1.5	0.3
Supervisors: sales occupations, commodities (5130)	1.3	1.4	0.5
Commercial travellers (5133)	1.1	1.3	0.2

TABLE 2.11.a (con't)

Full- and Part-Time Employed 1985 Graduates in Each of the Twenty-One Most Common Current Occupations

Occupation (CCDO)	Percentage		
	Total	Full-time	Part-time
Writers and editors, publication (3351)	1.1	1.1	1.1
Total	52.7	53.2	49.2
Weighted N	26718	23281	3369

a. n.e.c. means "not elsewhere classified"

Table 2.11.b shows the percentage distribution of the employed 1985 graduates across the major group occupations of the CCDO. About one-half of the 1985 employed graduates are located in just three occupation groups: teaching and related fields (16.9 per cent), natural sciences, engineering, and mathematics (18.3 per cent), and managerial, administrative, and related (15.2 per cent). The table also shows that almost one-half (48.8%) of all graduates employed part-time work in only two occupational groups -- teaching and related and clerical and related.

A comparison of the current major group occupations in 1986 and 1983 indicates some changes in the three-year period. First, the percentage of graduates employed in natural sciences, engineering, and mathematics occupations has increased by two points. Second, the percentage of graduates in teaching and related occupations has decreased by about four points.

TABLE 2.11.b

Full- and Part-Time Employed 1985 Graduates
by Current Occupation, CCDO Major Groups

Major Group	Total	Percentage[a] Full-time	Part-time
Managerial, administrative, and related	15.2	17.0	3.4
Natural sciences, engineering, and mathematics	18.3	20.4	3.7
Social sciences and related	10.4	10.7	8.5
Religion	0.6	0.6	1.0
Teaching and related	16.9	14.7	31.5
Medicine and health	9.4	9.6	7.5
Artistic, literary, performing arts, and related	3.3	3.1	5.1
Sport and recreation	0.6	0.4	2.0
Clerical and related	10.9	10.0	17.3
Sales	7.4	7.1	9.1
Service	3.1	2.7	6.3
Farming, horticultural, and animal-husbandry	0.7	0.7	0.5
Fishing, hunting, trapping, and related	-[b]	-[b]	-
Forestry and logging	0.1	0.1	0.3
Mining and quarrying	0.1	0.1	0.1
Processing	0.3	0.3	0.4
Machining and related	0.1	0.1	-
Product fabricating, assembling, and repairing	0.6	0.6	0.6
Construction trades	0.6	0.6	0.5
Transport-equipment operating	0.3	0.3	0.4
Material-handling and related	0.2	0.1	0.5

TABLE 2.11.b (con't)

Major Group	Total	Percentage[a] Full-time	Part-time
Other crafts and equipment-operating	0.3	0.2	0.2
Other occupations	0.5	0.3	1.0
Total	100.0	100.0	100.0
Weighted N	26718	23281	3369

a. Percentages may sum to other than 100.0 due to rounding.
b. Less than 0.1 per cent

2.12 Industry

Occupations can be classifed by specific industry (e.g., Chemical Industry), as well as by type of work (e.g., Chemical Engineering). In Canada, a widely used schema for classification is the Standard Industrial Classification (SIC), in which specific industries are identified and grouped into a smaller number of major divisions. The 1985 graduates are more likely to be employed in certain major divisions than in others, just as they tend to be concentrated in a relatively small number of broad occupational categories. Table 2.12 presents the distribution of the full- and part-time employed 1985 graduates across the set of major SIC divisions. As these data show, 71.1 per cent of the graduates are located in one or another of the five largest SIC divisions: manufacturing, business service, government service, educational service, and health and social

service. As well, graduates who are employed part-time are more likely to work in the retail trade, educational services, and health and social service industries.

A number of differences can be seen between the 1982 and 1985 graduates in terms of their distributions across industrial categories. First, the percentage of graduates employed in manufacturing has increased by almost 4 per cent. And, while the percentages of graduates in educational or government services have decreased over the three-year period, the percentages of graduates in business services, health and social services, finance and insurance, and retail trade have all increased.

Another way to treat industries is to distinguish between those which are part of the private sector and those which belong to the public sector. The latter includes not only public administration, but also the full range of government-sponsored educational, health, and other services, along with crown corporations. When this classification is made, 45.9 per cent of the 1985 graduates were found to be employed in the public sector at the time of the survey, and the remaining 54.1 per cent in the private sector. This represents a change from 1983, when 48.7 per cent of the 1982 graduates were found to be employed in the public sector.

TABLE 2.12

Full- and Part-Time Employed 1985 Graduates by Industry of Current Occupation, SIC Divisions

Industry	Percentage[a]		
	Total	Full-time	Part-time
Agriculture and related service	1.0	1.1	0.6
Fishing and trapping	-[b]	-[b]	-
Logging and forestry	0.1	0.1	-
Mining, including milling, quarrying, and oil wells	0.9	1.0	0.3
Manufacturing	14.6	16.2	3.4
Construction	1.3	1.5	0.3
Transportation and storage	1.1	1.1	0.9
Communication and other utilities	2.8	2.9	2.0
Wholesale trade	1.3	1.4	0.5
Retail trade	5.3	4.2	12.6
Finance and insurance	6.8	7.3	3.2
Real-estate operator and insurance agent	0.6	0.6	0.2
Business service	13.6	15.1	3.8
Government service	9.4	9.7	7.2
Educational service	19.9	17.6	36.1
Health and social service	13.6	13.5	14.5
Accommodation, food, and beverage	1.9	1.6	3.4
Other industries	5.7	5.0	11.1
Total	100.0	100.0	100.0
Weighted N	26656	23225	3365

a. Percentages may sum to other than 100.0 due to rounding.
b. Less than 0.1 per cent.

2.13 Earnings

The percentage distribution of the annual incomes which the full- and part-time graduates of 1985 earned in their current jobs is shown in Table 2.13. The overall average was $22,938 with those working full-time earning $24,313, on the average, and those working part-time earning $13,185 on the average (see Chapter 3 for analysis of full-time earnings). Due to the inflation of the Canadian dollar, coupled with the differences between the 1979, 1982, and 1985 graduates in the percentage employed full-time, no simple comparisons have been made between the three surveys in terms of the relative earning power of graduates.

TABLE 2.13

Full- and Part-Time Employed 1985 Graduates by Level of Annual Income From Current Job

Income	Total	Percentage[a] Full-time	Part-time
Less than $10,000	10.2	3.8	55.7
$10,000 to $11,999	3.2	2.3	9.6
$12,000 to $13,999	4.4	3.9	7.7
$14,000 to $15,999	6.5	6.5	6.6
$16,000 to $17,999	7.0	7.4	4.2
$18,000 to $19,999	7.3	7.8	4.0
$20,000 to $21,999	8.2	8.9	3.7
$22,000 to $23,999	8.4	9.2	2.5
$24,000 to $25,999	9.8	10.9	1.8
$26,000 to $27,999	8.9	9.9	1.1
$28,000 to $29,999	6.8	7.7	1.0
$30,000 to $34,999	8.6	9.6	1.5
$35,000 to $39,999	3.5	3.9	0.2
$40,000 or more	7.1	8.1	0.3
Mean Income	$22,938	$24,313	$13,185
Total	100.0	100.0	100.0
Weighted N	24631	21570	2988

a. Percentages may sum to other than 100.0 due to rounding.

2.14 Job Satisfaction

Table 2.14.a shows the 1985 graduates' overall current job satisfaction and indicates that 39.3 per cent of graduates were very satisfied, and 39.9 per cent of graduates were quite satisfied with their jobs. This represents a slight downward shift in job satisfaction from 1983, when 41.6 per cent and 37.5 per cent of 1982 graduates respectively, were very or quite satisfied with their current jobs.

Table 2.14.b subdivides job satisfaction into four selected aspects and indicates the percentage of 1982 graduates who said they were either very or quite satisfied with these job aspects. The table reveals that almost seventy per cent of graduates were very or quite satisfied with their current salary and/or opportunity for advancement. Over eighty per cent were satisfied with the opportunity for personal initiative and 87.1 per cent were satisfied with the opportunity for experience and learning skills. When compared with the corresponding data from the 1982 survey, the data reveal a similar pattern.

TABLE 2.14.a

1985 Graduates' Satisfaction with Current Position
Full-time Employed

Job Satisfaction	Percentage[a]
Very satisfied	39.3
Quite satisfied	39.9
Not very satisfied	14.6
Not at all satisfied	6.1
Total %	100.0
Weighted N	22701

a. Percentages may sum to other than 100 due to rounding.

TABLE 2.14.b

1985 Graduates Very or Quite Satisfied with Selected Aspects of Jobs, Full-time Employed

Job Aspect	Percentage Very or Quite Satisfied	
	Percentage	Weighted N
Salary	69.3	22975
Opportunity for advancement	69.0	22648
Opportunity for personal initiative	80.6	22863
Opportunity for experience and learning skills	87.1	22888

2.15 Migration

Table 2.15 indicates that 91.5 per cent of the employed 1985 graduates had jobs in Ontario at the time of the survey; 7.4 per cent were in other Canadian provinces; 0.5 per cent had relocated to the United States; and 0.7 per cent had moved to other parts of the world. The proportion of 1985 graduates with jobs outside of Ontario in 1986 was lower than that of the 1982 graduates in 1983. Eleven per cent of 1982 graduates were employed outside of Ontario in 1983.

TABLE 2.15

Full- and Part-Time Employed 1985 Graduates by Location of Current Job

Location	Percentage[a]
Atlantic Provinces	1.0
Quebec	2.4
Ontario	91.5
Manitoba, Saskatchewan	1.0
Alberta	1.8
British Columbia, Yukon, Northwest Territories	1.2
United States	0.5
Other	0.7
Total	100.0
Weighted N	26330

a. Percentages may sum to other than 100.0 due rounding.

Summary and Conclusions

This chapter has provided a profile of the 1985 graduates in terms of selected demographic and social-background characteristics, aspects of their educational experiences, and features of their early career paths. The findings indicate that, first, slightly more women than men graduate from university-level institutions in Ontario (54.9 per cent). Second, the parents of university-level graduates are better educated on the average than are Ontario adults aged 45-64. Third, 1985 graduates' fathers are more likely to be employed in natural sciences, engineering, and mathematics (9.3 per cent); managerial, administrative, and related (21.2%); sales (7.7 per cent) occupations. Mothers are more likely to be employed in clerical and related (31.7%); teaching and related (12.3%); medicine and health (12.0%) occupations. Fourth, 81.0 per cent of 1985 graduates were in the labour force in the spring of 1986. Fifth, the unemployment rate among the 1985 graduates in the spring of 1986 was 7.3 per cent. Sixth, 18.3 per cent of 1985 spring graduates continued their education as full-time students. Seventh, 52.7 per cent of employed 1985 graduates are employed in just twenty-one different occupations.

Considering the short period of time encompassed by these three surveys of university-level graduates in Ontario, it should not be surprising that the experiences of the 1985 respondents largely mirror those of their counterparts in 1982 and 1979. Even so, some short-run changes can be seen, including a shift

towards greater participation of women in university-level institutions, an increase in graduates receiving four-year bachelor's and first professional degrees and an increase in the relative representation of business and commerce graduates. As well, a shift has occurred in the occupational and industrial distributions towards a greater percentage of 1985 graduates (than 1982 graduates) employed in natural sciences, engineering and mathematics occupations and a smaller percentage of 1985 graduates than 1982 graduates employed in teaching occupations.

CHAPTER 3 SOME SOCIAL AND ECONOMIC FACTORS IN THE EDUCATIONAL AND EARLY CAREER DECISIONS OF THE 1985 SPRING GRADUATES

The previous chapter documented how the 1985 Ontario spring graduates differed from one another in terms of a selected set of demographic and social-background attributes, academic experiences, and aspects of their early careers. In the present chapter, the extent to which certain educational and early career decisions are related to the facts of demography, origins, and academic choices are examined.

3.1 Level of Degree or Diploma

In the first section of this chapter, the gender and social background are examined in relation to educational level attained for the 1985 graduates.

3.1.1 Gender

The data in Table 3.1.1 show certain differences by gender in the level of qualification obtained. Specifically, proportionately more women are holders of three-year bachelor's degrees and one-year Bachelor of Education degrees, while proportionately more men are the recipients of diplomas, four-year bachelor's, first professional, master's, and doctoral degrees.

These findings replicate the pattern of results found for the 1982 survey, with a few minor differences. Compared to the 1982 graduates, proportionately more women graduated in 1985 with

four-year bachelor's degrees and master's degrees and fewer with Bachelor of Education degrees.

TABLE 3.1.1

1985 Graduates by Level of Degree or Diploma and Gender

Level of Degree or Diploma	Percentage[a] Gender		
	Males	Females	Total
Diploma	5.9	3.8	4.7
Bachelor's - three-year	20.9	27.5	24.5
Bachelor's - four-year	49.0	44.2	46.4
Bachelor of Education (one-year only)	5.5	11.8	8.9
First Professional	6.4	4.0	5.0
Master's	11.0	8.0	9.3
Ph.D.	1.3	0.5	0.8
Other[b]	0.1	0.2	0.2
Total	100.0	100.0	100.0
Weighted N	16328	19917	36245

a. Percentages may sum to other than 100.0 due to rounding.

b. Category "Other" includes those with diplomas, professional engineers, and associates with OCA.

3.1.2 Parents' Education

Do university graduates with relatively well educated parents differ from those with relatively poorly educated parents in terms of the levels of degrees they attain? An analysis of the relationships between mother's, father's, and combined mother's and father's educational levels, on the one hand, and respondent's level of diploma or degree, on the other, shows a weak, positive relationship between the respondent's level of degree and his or her parents' highest level of educational attainment. That is, graduates who earned first professional or postgraduate degrees in 1985 were more likely to have a parent who also had a professional or postgraduate degree (see Table 3.1.2). This relationship was also found in the 1983 survey.

TABLE 3.1.2

1985 Graduates by Level of Degree or Diploma and Highest Level of Educational Attainment of Mother or Father

Percentage[a]

Graduate's Level of Degree or Diploma Secondary School	Highest Level of Educational Attainment of Mother or Father						
	No Formal Schooling (self-taught)	Some Elementary Schooling	Completed Elementary Schooling	Some Secondary Schooling	Secondary School Graduation	Apprenticeship or Journeyman	Non-University Certificate or Diploma
Diploma	13.1	7.8	5.1	5.3	5.0	5.9	5.2
Bachelor's - three-year	27.9	24.0	25.6	27.5	26.3	24.6	26.9
Bachelor's - four-year	34.3	43.9	43.9	40.8	45.6	47.4	46.9
B.Ed. (one-year only)	1.7	11.6	12.0	11.1	8.5	9.4	8.8
First Professional	5.1	4.2	4.2	4.5	3.5	3.1	4.4
Master's	17.9	7.5	8.7	9.9	9.7	8.4	7.2
Ph.D.	-	0.8	0.5	0.7	1.2	1.1	0.4
Other	-	0.2	-	0.3	0.2	-	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	127	1882	1895	3835	5201	2207	2927

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 3.1.2 (Continued)

Graduate's Level of Degree or Diploma	Percentage[a] Highest Level of Educational Attainment of Mother or Father							
	Professional Certificate or Diploma	Some University Experience	Bachelor's Degree(s)	Degree in Medicine, Dentistry, or Other Professional Program	Master's Degree(s)	Earned Doctorate	Other	Total
Diploma	4.2	3.6	3.3	2.6	3.6	2.4	4.8	4.6
Bachelor's - three-year	24.7	24.7	22.3	19.2	21.6	18.2	26.8	24.5
Bachelor's - four-year	48.5	46.4	49.4	48.5	48.9	52.8	40.8	46.5
B.Ed. (one-year only)	8.9	9.6	7.7	7.2	8.0	5.2	8.7	9.0
First Professional	4.8	4.4	6.4	8.8	6.7	8.7	9.2	5.1
Master's	7.9	10.4	9.9	11.3	10.3	11.2	8.7	9.3
Ph.D.	0.7	0.9	0.7	2.1	0.5	1.5	1.0	0.8
Other	0.2	-	0.4	0.4	0.3	-	-	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	3453	2371	5820	1140	2506	1174	620	35158

a. Percentages may sum to other than 100.0 due to rounding

3.1.3 Parents' Main Occupation in 1985

Analyses of the relationships between mother's and father's occupations, on the one hand, and respondent's level of diploma or degree, on the other, showed that the latter was only marginally related to the former. Two relationships are of note. First, 1985 graduates whose mothers or fathers were employed in natural sciences, engineering, and mathematics occupations were disproportionately represented among holders of four-year bachelor's degrees. Second, 1985 graduates whose mothers or fathers were employed in religious occupations were over-represented among holders of Bachelor of Education, first professional or master's degrees and under-represented among holders of three or four-year bachelor's degrees. Parents' main occupations were not measured in 1982, and so no comparisons are possible between the 1982 and 1985 graduates on this aspect (see Tables 3.1.3.a. and 3.1.3.b).

TABLE 3.1.3.a

1985 Graduates by Level of Degree or Diploma and Father's Main Occupation in 1985

Graduate's Level of Degree or Diploma	Percentage[a] Father's Main Occupation in 1985												
	Manag.	Nat.Sc.	Soc.Sc.	Relig.	Teach.	Med.	Art.	Sport.	Cler.	Sales	Serv.	Other Occ.	Total
Diploma	3.5	3.3	3.2	4.3	1.7	2.8	8.9	-	5.7	3.7	6.4	6.1	4.6
Bachelor's - three-year	25.0	20.1	25.0	19.0	22.5	21.8	20.3	20.0	26.6	29.7	25.1	24.4	24.3
Bachelor's - four-year	51.2	58.2	43.1	43.0	53.0	49.3	50.2	19.5	47.9	46.5	50.7	49.8	50.5
B.Ed. (one-year only)	7.3	4.6	8.6	12.1	9.1	6.2	9.4	34.9	10.0	8.5	8.9	9.4	8.3
First Professional	4.6	6.6	12.1	8.4	6.2	9.6	3.0	12.9	2.7	4.3	3.5	4.0	5.0
Master's	7.6	6.6	7.6	12.4	6.7	8.6	8.2	12.0	7.2	7.1	4.8	5.8	6.7
Ph.D.	0.6	0.5	0.3	0.7	0.7	1.5	-	-	-	0.1	0.7	0.3	0.5
Other	0.2	0.1	-	-	0.1	0.2	-	-	-	0.1	-	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	5259	2291	740	247	1771	1186	270	19	764	1918	1232	9057	24755

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 3.1.3.b

1985 Graduates by Level of Degree or Diploma and
Mother's Main Occupation in 1985

Graduate's Level of Degree or Diploma	Percentage[a]												
	Mother's Main Occupation in 1985												
	Manag.	Nat.Sc.	Soc.Sc.	Relig.	Teach.	Med.	Art.	Sport.	Cler.	Sales	Serv.	Other Occ.	Total
Diploma	3.1	4.7	4.6	9.4	3.5	3.2	6.6	-	4.4	4.4	4.2	6.7	4.4
Bachelor's - three-year	25.0	15.6	22.2	10.2	20.9	24.4	23.5	31.0	25.4	24.4	25.4	25.7	24.4
Bachelor's - four-year	49.9	65.9	52.2	38.3	51.7	52.6	45.8	62.5	50.0	50.9	52.3	49.1	51.0
B.Ed. (one-year only)	8.1	2.7	6.7	9.7	11.1	6.0	7.3	-	8.2	7.3	10.0	9.5	8.4
First Professional	5.0	6.6	5.2	16.1	5.0	5.0	6.0	5.7	4.7	4.0	3.1	4.0	4.0
Master's	8.5	4.5	8.0	16.2	6.5	8.2	9.9	-	5.9	7.0	4.0	4.7	6.5
Ph.D.	0.4	-	0.3	-	0.5	0.4	-	-	0.6	0.9	0.2	0.3	0.5
Other	-	-	-	-	-	0.2	-	-	0.1	0.3	-	-	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1225	89	726	41	1900	1933	262	32	5111	1513	1074	2120	16104

a. Percentages may sum to other than 100.0 due to rounding.

3.1.4 Language First Learned to Speak

Table 3.1.4 shows that the language first learned to speak by the 1985 graduates is related to their level of degree attained. Specifically, graduates who first learned French were more likely than others to have graduated with three-year bachelor's degrees and less likely to have graduated with four-year bachelor's degrees. Graduates who first learned to speak a language other than English or French were more likely than others to have graduated with a diploma or a four-year bachelor's degree. Language first learned to speak was not measured on the 1982 survey and, therefore, no comparisons are possible between the two cohorts.

TABLE 3.1.4

1985 Graduates by Level of Degree or Diploma and Language First Learned to Speak

Graduate's Level of Degree or Diploma	Percentage[a]			
	Language First Learned to Speak			
	English	French	Other	Total
Diploma	4.3	5.4	6.8	4.7
Bachelor's - three-year	24.7	27.5	22.3	24.5
Bachelor's - four-year	46.4	42.0	48.2	46.4
B.Ed. (one-year only)	9.1	8.7	8.3	9.0
First Professional	5.1	5.9	4.2	5.0
Master's	9.4	9.9	9.1	9.4
Ph.D.	0.8	0.6	0.9	0.8
Other	0.2	-	0.2	0.2
Total	100.0	100.0	100.0	100.0
Weighted N	28656	2219	5197	36072

a. Percentages may sum to other than 100.0 due to rounding.

3.2 Major Fields of Study

The present section focuses on some possible demographic and social-background influences on people's decisions to pursue particular fields of study.

3.2.1 Gender

The male and female spring graduates of 1985 differ in their major fields of study, as can be seen in Table 3.2.1. In particular, proportionately more men graduated in the fields of commerce and business administration, engineering and applied sciences, and mathematics, and physical education. Proportionately more women graduated in the fields of education, fine and applied arts, humanities, social sciences, and health professions and occupations. There was little difference in the relative representation of the sexes in the field of agricultural and biological sciences.

TABLE 3.2.1

1985 Graduates by USIS Field of Study and Gender

Field of Study	Percentage[a]		
	Gender		
	Males	Females	Total
EDUCATION & GENERAL ARTS	9.8	21.8	15.9
General Arts	0.4	1.0	0.7
Elementary/Secondary Teacher Training	6.9	15.1	11.3
Non-Teaching Field	0.6	0.8	0.7
Physical Education	1.9	3.4	2.7
Education N.E.C.	0.0	0.4	0.2
FINE & APPLIED ARTS	2.1	4.1	3.2
Music	0.5	1.0	0.8
Applied Arts	0.8	1.3	1.0
Fine & Applied Arts N.E.C.	0.8	1.9	1.4
HUMANITIES	8.4	14.4	11.7
English Language and/or Literature	1.8	4.7	3.4
French Language and/or Literature	0.3	2.4	1.5
History	2.4	1.9	2.1
Mass Media Studies (including journalism)	1.4	1.7	1.6
Religious & Theological Studies	1.1	0.9	1.0
Humanities N.E.C.	1.3	2.7	2.1
SOCIAL SCIENCES	20.5	27.8	24.5
Economics	5.1	2.7	3.8
Geography	2.6	1.8	2.1
Law & Jurisprudence	3.3	2.3	2.8
Political Science	3.2	2.2	2.6
Psychology	2.4	9.4	6.3
Social Work & Social Welfare	0.4	2.6	1.6
Sociology	1.2	4.0	2.7
Social Sciences N.E.C.	2.3	2.8	2.6
COMMERCE, MANAGEMENT & BUSINESS ADMINISTRATION	16.8	10.5	13.3

TABLE 3.2.1 (Continued)

1985 Graduates by USIS Field of Study and Gender

Field of Study	Percentage[a] Gender		
	Males	Females	Total
AGRICULTURE & BIOLOGICAL SCIENCES	6.6	6.4	6.5
Agriculture	1.5	0.4	0.9
Biology	3.1	2.7	2.9
Household Science	0.1	1.4	0.8
Agriculture & Biological Sciences N.E.C.	1.9	1.8	1.9
ENGINEERING & APPLIED SCIENCE	19.5	2.1	9.9
Chemical Engineering	2.2	0.4	1.2
Civil Engineering	2.7	0.2	1.3
Electrical Engineering	4.5	0.2	2.1
Mechanical Engineering	5.0	0.3	2.4
Other Engineering	3.4	0.4	1.8
Engineering & Applied Sciences N.E.C.	1.6	0.6	1.1
HEALTH PROFESSIONS	4.0	8.4	6.4
Dental Studies & Research	0.8	0.2	0.5
Medical Studies & Research	2.4	1.6	1.9
Nursing	0.1	3.6	2.0
Pharmacy	0.3	0.7	0.5
Rehabilitation Medicine	0.2	1.8	1.0
Health Professions N.E.C.	0.4	0.5	0.4
MATHEMATICS & PHYSICAL SCIENCES	12.3	5.3	8.5
Computer Science	4.7	1.9	3.2
Mathematics	2.4	1.9	2.1
Chemistry	1.7	0.7	1.1
Geology & Related	2.1	0.6	1.3
Physics	1.4	0.2	0.7
Mathematics & Physical Sciences N.E.C.	0.1	0.0	0.1

a. Percentages may sum to other than 100.0 due to rounding.

Looking at the more detailed fields of study, there are a number of gender differences that are not revealed at the aggregated level. For example, within the humanities, relatively more males than females graduated with degrees in history or religious and theological studies, whereas relatively more women specialized in English or French language and/or literature. There were also gender differences within the social sciences and health professions that are not apparent at the aggregated level. Females were relatively more likely than males to graduate with degrees in psychology, social work, and sociology, whereas males were relatively more likely than females to graduate with degrees in economics, geography, law, and political science. Also, males were relatively more likely than females to specialize in dental studies and research, and medical studies and research. Females were relatively more likely to have degrees or diplomas in nursing, pharmacy, and rehabilitation medicine.

The pattern of male-female differences in major fields of study which is revealed in the data for the 1985 respondents is very similar to that which was found for the 1982 and 1979 respondents, although some small changes have occurred in the interim. In particular, proportionately more women graduates in 1985 than in 1982 were holders of degrees in social sciences, and mathematics and physical sciences, and proportionately more males graduated in 1985 with degrees in mathematics and physical sciences. And, as documented in the 1983 survey results, there has been a slight decrease since 1979 in the proportion of men graduating in education, physical education, recreation and

leisure and an increase in the proportion of women in the field of commerce and business administration.

3.2.2 Parents' Education

Parents' education was found to be modestly related to the 1985 graduates' major fields of study, as shown in Table 3.2.2. A number of findings are noted.

1985 graduates in the field of education, physical education, recreation and leisure were relatively more likely than others to have families in which at least one parent had elementary or some secondary schooling and relatively less likely to have at least one parent with a university degree.

1985 humanities graduates were disproportionately represented among those with at least one parent who has a postgraduate degree.

1985 commerce and business administration graduates were relatively less likely than others to have at least one parent with a postgraduate degree.

1985 graduates in agricultural and biological sciences were relatively less likely to have at least one parent with secondary school graduation or less and relatively more likely to have at least one parent with a bachelor's, first professional or postgraduate degree.

1985 graduates in the health professions and occupations were twice as likely as the average graduate to have at least one parent with a degree in medicine, dentistry or other professional program.

Comparisons with the 1983 survey of 1982 graduates indicate that the first and last finding noted above were also observed for the 1982 graduates.

TABLE 3.2.2

1985 Graduates by Major Field of Study and Highest Level of Educational Attainment of Mother or Father

Percentage[a]

Major Field of Study	Parents' Education: No Formal Schooling (self-taught)	Some Elementary Schooling	Completed Elementary Schooling	Some Secondary Schooling	Secondary School Graduation	Apprenticeship or Journeyman	Non-university Certificate or Diploma
Education, physical education, recreation and leisure	5.1	18.4	21.0	18.9	16.1	16.8	15.5
Fine and applied arts	5.3	1.7	3.1	2.2	3.1	3.6	2.4
Humanities and related	3.6	12.9	11.4	12.0	10.2	10.8	12.0
Social sciences and related	15.2	21.2	24.8	26.7	24.1	23.2	23.6
Commerce and business administration	20.1	15.0	13.7	13.8	15.6	13.7	11.9
Agricultural and biological sciences	3.0	3.5	4.5	6.2	7.1	6.5	7.2
Engineering and applied sciences	22.8	14.3	9.9	7.7	9.6	11.5	11.3
Health professions and occupations	13.2	6.1	4.0	4.7	5.6	6.5	7.7
Mathematics and physical sciences	11.8	7.0	7.6	7.9	8.7	7.5	8.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	127	1884	1890	3827	5197	2207	2922

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 3.2.2 (Continued)

1985 Graduates by Major Field of Study and Highest Level of Educational Attainment of Mother or Father

Major Field of Study	Percentage[a] Parents' Education							
	Professional Certificate or Diploma	Some University Experience	Bachelor's Degree(s)	Degree in Medicine, Dentistry, or Other Professional Program	Master's Degree(s)	Earned Doctorate	Other	Total
Education, physical education, recreation and leisure	16.9	17.9	13.5	14.4	13.2	9.5	12.1	16.0
Fine and applied arts	3.7	3.4	3.4	3.6	3.9	3.5	5.6	3.2
Humanities and related	11.6	11.4	11.6	11.7	13.4	13.5	12.4	11.6
Social sciences and related	24.3	26.6	24.4	22.6	23.8	24.0	34.0	24.5
Commerce and business administration	12.6	13.2	13.5	10.1	11.9	9.5	12.9	13.4
Agricultural and biological sciences	6.9	5.4	6.2	11.4	7.5	9.1	6.6	6.6
Engineering and applied sciences	8.3	7.4	11.0	7.1	10.8	11.6	6.6	9.9
Health professions and occupations	7.4	7.2	6.8	11.7	6.7	6.5	4.2	6.5
Mathematics and physical sciences	8.3	7.6	9.5	7.4	8.7	12.8	5.5	8.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	3449	2367	5805	1138	2504	1172	620	35109

3.2.3 Parents' Main Occupation in 1985

Analyses of the relationships of father's and mother's main occupations in 1985 to the graduate's major field of study indicate a number of connections between the two.

1985 graduates who had degrees in education, physical education, and recreation and leisure, were more likely than graduates as a whole to have mothers who were employed in teaching and related fields and less likely to have mothers employed in natural sciences, engineering and mathematics occupations.

1985 graduates who hold degrees in fine and applied arts were more likely than graduates as a whole to have mothers and/or fathers employed in artistic, literary, performing arts and related occupations.

1985 graduates who hold degrees in the humanities were more likely than graduates as a whole to have mothers or fathers employed in the social sciences, religion, and teaching and related occupations.

1985 graduates who had degrees in the social sciences were more likely than graduates as a whole to have fathers employed in social science and related occupations.

1985 graduates who had degrees in commerce and business administration were less likely than graduates as a whole to have fathers employed in an occupation in religion, teaching or artistic, literary, performing arts and related fields.

1985 graduates who had degrees in agricultural and biological sciences were more likely than graduates as a whole to have parents employed in occupations in natural sciences, engineering and mathematics or health professions and occupations, and they were also less likely to have fathers employed in social science and related occupations.

1985 graduates who had degrees in engineering and applied sciences were more likely than graduates as a whole to have parents employed in occupations in natural sciences, engineering and mathematics.

1985 graduates who had degrees in the health professions and occupations were more likely than graduates as a whole to have parents whose main occupations were in medicine and health.

1985 graduates who had degrees in mathematics and physical sciences were more likely than graduates as a whole to have

fathers whose main occupations were in natural sciences, engineering and mathematics, and teaching and related fields.

(See Tables 3.2.3.a and 3.2.3.b).

TABLE 3.2.3.a

1985 Graduates by Major Field of Study and Father's Main Occupation in 1985

Major Field of Study	Percentage[a] Father's Main Occupation in 1985												
	Manag.	Nat.Sc.	Soc.Sc.	Relig.	Teach.	Med.	Art.	Sport.	Cler.	Sales	Serv.	Other Occ.	Total
Education, physical education, recreation and leisure	13.0	9.9	11.7	20.8	14.8	12.7	15.3	34.9	16.5	15.2	15.7	15.9	14.4
Fine and applied arts	3.4	3.3	2.8	2.9	2.8	3.8	10.4	-	3.2	2.3	3.1	3.2	3.3
Humanities and related	10.6	8.5	16.4	16.6	15.1	10.4	14.1	-	8.3	11.1	10.7	10.8	11.0
Social sciences and related	27.3	22.7	38.3	28.0	21.5	23.5	23.3	12.9	25.0	27.5	20.5	22.3	24.3
Commerce and business administration	15.6	10.6	11.1	6.7	9.2	10.0	8.0	32.3	13.7	15.3	15.4	14.3	13.5
Agricultural and biological sciences	5.8	9.4	3.8	7.0	7.1	11.6	4.4	-	6.0	7.2	5.0	7.9	7.3
Engineering and applied sciences	9.7	16.1	6.2	9.4	10.5	7.7	10.1	-	12.6	8.2	12.9	11.3	10.9
Health professions and occupations	5.8	8.2	4.8	7.0	7.8	12.4	3.7	9.8	4.9	6.0	6.2	6.1	6.6
Mathematics and physical sciences	8.8	11.3	4.8	1.6	11.2	7.8	10.7	10.2	9.8	7.2	10.4	8.1	8.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	5256	2291	740	247	1771	1184	266	19	762	1914	1232	9049	24731

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 3.2.3.b

1985 Graduates by Major Field of Study and Mother's Main Occupation in 1985

Major Field of Study	Percentage[a] Mother's Main Occupation in 1985											
	Manag.	Nat.Sc.	Soc.Sc.	Relig.	Teach.	Med.	Art.	Sport.	Cler.	Sales	Serv.	Other Occ.	Total
Education, physical education, recreation and leisure	14.0	4.8	12.0	15.5	18.5	13.0	13.6	7.6	15.3	13.0	17.3	14.5	14.9
Fine and applied arts	3.9	4.5	6.1	-	4.0	3.4	7.2	-	3.0	3.2	3.8	3.0	3.5
Humanities and related	12.8	11.9	15.2	9.9	13.2	10.4	12.7	-	10.6	11.2	9.7	10.4	11.2
Social sciences and related	25.3	26.7	25.5	15.5	21.6	25.2	20.5	43.4	24.8	27.2	23.7	23.0	24.4
Commerce and business administration	14.0	13.3	11.4	10.9	10.5	11.7	12.6	24.4	14.5	12.8	12.3	14.0	13.1
Agricultural and biological sciences	5.7	12.1	6.8	13.2	6.1	9.4	6.5	-	6.4	8.0	6.3	8.3	7.1
Engineering and applied sciences	10.5	15.8	10.1	9.0	9.6	10.4	9.2	18.5	9.6	10.4	11.8	11.2	10.3
Health professions and occupations	6.1	6.6	5.7	20.7	7.8	8.9	6.0	-	7.0	7.3	5.0	6.1	7.0
Mathematics and physical sciences	7.7	4.5	7.3	5.2	8.7	7.5	11.7	6.1	8.8	6.8	10.1	9.5	8.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1222	89	724	41	1975	1933	262	32	5106	1511	1072	2117	16085

a. Percentages may sum to other than 100.0 due to rounding.

3.2.4 Language First Learned to Speak

The data in Table 3.2.4 indicate that 1985 graduates who first learned to speak either French or a language other than French or English differed in their fields of study from graduates who learned English as their first language. In particular, the French-speaking 1985 graduates were more likely than graduates as a whole to have taken degrees in the fields of education, physical education, recreation and leisure, humanities, and commerce and business administration and less likely to have taken degrees in the fields of agricultural and biological sciences, engineering and applied sciences, health professions and occupations, and mathematics and physical sciences. The data also show that 1985 graduates who first learned to speak a language other than English or French were more likely than graduates as a whole to major in engineering and applied sciences and mathematics and physical sciences and less likely to major in education, physical education, recreation and leisure, and the social sciences.

TABLE 3.2.4

1985 Graduates by Major Field of Study and Language First Learned to Speak

Major Field of Study	Percentage[a]			
	Language First Learned to Speak			
	English	French	Other	Total
Education, physical education, recreation and leisure	16.0	18.1	13.5	16.0
Fine and applied arts	3.1	2.9	3.8	3.2
Humanities and related	11.4	16.9	11.2	11.7
Social sciences and related	25.4	25.4	19.2	24.5
Commerce and business administration	13.2	15.7	13.1	13.3
Agricultural and biological sciences	6.8	3.1	6.5	6.5
Engineering and applied sciences	9.4	6.1	14.6	9.9
Health professions and occupations	6.5	4.6	6.6	6.4
Mathematics and physical sciences	8.0	7.2	11.5	8.5
Total	100.0	100.0	100.0	100.0
Weighted N	28615	2215	5193	36023

a. Percentages may sum to other than 100.0 due to rounding.

3.3 Employment Status

Graduates from Ontario's university-level educational system typically pursue one of two courses upon receipt of their degrees: they either move into the labour force or continue their studies. This section of the report examines the extent to which employment status is related to gender, language, and academic choices.

3.3.1 Gender

Table 3.3.1 shows that approximately equal proportions of male and female spring graduates were in the labour force at the time of the survey, with proportionately more men employed full-time and women part-time. Furthermore, approximately equal proportions of men and women were not employed and looking for employment, while a slightly higher proportion of women than men were not employed and not looking for employment. When the number of men and women who are unemployed is expressed as a percentage of the labour force, the unemployment rate for women (7.7 per cent) was marginally higher than that for men (7.1 per cent). Finally, relatively, if only slightly, more men (19.6 per cent) than women (18.3 per cent) indicated that they were full-time students at the time of the survey.

TABLE 3.3.1

1985 Graduates by Employment Status[a] and Gender

Employment Status	Percentage[b]		
	Gender		
	Males	Females	Total
Employed on a full-time basis	68.8	62.2	65.2
Employed on a part-time basis	4.8	10.5	7.9
Not employed but waiting for a job to start or awaiting recall	1.1	1.7	1.4
Not employed and looking for employment	4.5	4.4	4.4
Not employed and not looking for employment	1.2	2.9	2.1
Full-time student	19.6	18.3	18.9
Unemployment rate	7.1	7.7	7.4
Total	100.0	100.0	100.0
Weighted N	15950	19170	35120

a. Calculations do not match the methodology used in the Labour Force Survey as all full-time students are reported from the labour force figures.

b. Percentages may sum to other than 100.0 due to rounding.

Comparisons of these findings with those for the 1983 survey of 1982 graduates indicate differences between the two cohorts in the relationship of gender to employment status. In 1983, the unemployment rate for 1982 female graduates was considerably lower than that for male graduates. In 1986, the unemployment rates for 1985 male and female graduates were very similar.

3.3.2 Level of Degree or Diploma

The data in Tables 3.3.2 and 3.3.2.a indicate that, across degree levels, the more educated a person is, the more likely he or she is to be in the labour force and employed in a full-time job. Holders of one-year Bachelor of Education, first professional, master's, and doctoral degrees have higher rates of labour force participation than do holders of three- or four-year bachelor's degrees or diplomas (see Table 3.3.2.a). And holders of first professional and master's degrees have lower unemployment rates than do graduates as a whole. The highest unemployment rates were experienced by graduates with three-year bachelor's degrees, Bachelor of Education, and doctoral degrees.

TABLE 3.3.2

Labour Force Participation and Unemployment Rates for 1985 Spring Graduates by Level of Degree or Diploma, Spring 1986[a]

Level of Degree or Diploma	Labour Force Participation Rate	Unemployment Rate
Diploma	79.6	6.8
Bachelor's - three-year	76.5	9.2
Bachelor's - four-year	77.1	6.9
Bachelor of Education (one-year only)	96.8	8.6
First Professional	95.8	3.2
Master's	88.6	5.8
Ph.D.	96.5	8.7
Other	88.5	6.7
Total	81.0	7.3
Weighted N	29376	2138

a. Calculations match the methodology used in the Labour Force Survey.

TABLE 3.3.2.a

1985 Graduates by Level of Degree or Diploma and Employment Status[a]

Percentage[b]

Employment Status	Level of Degree or Diploma								
	Diploma	3-year Bachelor's	4-year Bachelor's	1-year B.Ed.	First Professional	Master's	Ph.D.	Other	Total
Employed on a full-time basis	60.9	57.0	64.5	64.5	89.1	77.6	81.2	84.4	65.2
Employed on a part-time basis	9.0	9.1	5.7	22.4	2.9	4.5	6.3	3.4	7.9
Employed but waiting for a job to start or awaiting recall	1.6	1.2	1.2	3.5	1.4	0.9	2.9	3.4	1.4
Unemployed and looking for employment	3.7	5.9	4.0	4.8	1.7	4.3	5.6	2.9	4.4
Unemployed and not looking for employment	2.2	3.3	1.8	1.4	1.3	1.8	2.2	3.0	2.1
Full-time student	22.6	23.5	22.8	3.4	3.7	11.0	1.9	2.9	18.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1681	8471	16316	3186	1805	3332	299	64	35153

a. Calculations do not match the methodology used in the Labour Force Survey.

b. Percentages may sum to other than 100.0 due to rounding.

While 65.2 per cent of the 1985 graduates were employed full-time at the time of the survey, this figure conceals a good deal of variation across diploma or degree levels. In particular, holders of first professional, master's, and doctoral degrees were much more likely than other graduates to be employed full-time, and holders of three-year bachelor's degrees were the least likely to have full-time jobs. As for part-time employment, the degree level which stands out is that of the one-year Bachelor of Education. Among holders of the one-year Bachelor of Education degree, 22.4 per cent were employed part-time in the spring following receipt of the degree. Finally, there is considerable variation in the category of full-time student. Some 22.6 per cent of the recipients of three-year bachelor's degrees and 23.5 per cent of the recipients of four-year bachelor's degrees were enrolled as full-time students in the year after graduation, followed by holders of diplomas (22.6), master's (11.0), first professional (3.7), one-year Bachelor of Education (3.4), and doctoral degrees (1.9).

Differences can be seen in the relationship of employment status to level of degree between the 1982 and 1985 graduates. First, the labour force participation rate of 1985 three-year bachelor's degree holders was comparable to that for four-year bachelor's degree holders, whereas participation for the former was much lower than that of the latter for 1982 graduates. Second, the unemployment rate one year after graduation for graduates with master's or doctoral degrees was higher for the

1985 graduates than for the 1982 graduates, despite the overall decline in unemployment rates.

3.3.3 Field of Study

As the data in Table 3.3.3 show, rates of labour force participation and unemployment vary across major fields of study. Graduates in health professions and occupations, commerce and business administration, and engineering and applied science have higher rates of labour force participation and lower rates of unemployment than do graduates in other fields of study (see Table 3.3.3.). Graduates in fine and applied arts and the humanities, followed by the social sciences, have lower rates of labour force participation and higher unemployment rates than do graduates in other fields of study.

TABLE 3.3.3

Labour Force Participation and Unemployment Rates for 1985 Spring Graduates by USIS Major Field of Study, Spring/Summer 1986[a]

USIS Field of Study	Labour Force Participation Rate	Unemployment Rate
EDUCATION & GENERAL ARTS	87.5	8.0
General Arts	46.1	10.7
Elementary/Secondary Teacher Training	95.7	8.4
Non-Teaching Field	95.9	1.6
Physical Education	62.0	8.3
Education N.E.C.	75.9	3.2
FINE & APPLIED ARTS	77.5	12.6
Music	52.0	6.7
Applied Arts	92.0	10.2
Fine & Applied Arts N.E.C.	81.3	16.7
HUMANITIES	70.5	10.5
English Language and/or Literature	64.5	9.3
French Language and/or Literature	67.6	10.1
History	58.3	10.4
Mass Media Studies (including journalism)	91.5	12.4
Religious & Theological Studies	82.6	2.7
Humanities N.E.C.	73.0	14.6
SOCIAL SCIENCES	76.6	8.5
Economics	77.6	7.8
Geography	73.2	10.8
Law & Jurisprudence	91.6	5.1
Political Science	65.9	11.1
Psychology	69.3	10.0
Social Work & Social Welfare	90.0	6.6
Sociology	78.7	7.9
Social Sciences N.E.C.	80.2	8.2
COMMERCE, MANAGEMENT & BUSINESS ADMINISTRATION	93.0	5.5

TABLE 3.3.3 (Continued)

USIS Field of Study	Labour Force Participation Rate	Unemployment Rate
AGRICULTURE & BIOLOGICAL SCIENCES	65.7	7.8
Agriculture	85.1	5.0
Biology	58.0	10.3
Household Science	84.1	3.1
Agriculture & Biological Sciences N.E.C.	59.7	9.1
ENGINEERING & APPLIED SCIENCE	83.6	5.4
Chemical Engineering	80.7	5.4
Civil Engineering	86.5	8.8
Electrical Engineering	87.6	3.2
Mechanical Engineering	82.9	6.1
Other Engineering	77.6	5.0
Engineering & Applied Sciences N.E.C.	86.8	4.7
HEALTH PROFESSIONS	92.7	1.9
Dental Studies & Research	97.4	1.3
Medical Studies & Research	91.0	2.0
Nursing	97.6	2.3
Pharmacy	81.4	1.4
Rehabilitation Medicine	92.6	1.7
Health Professions N.E.C.	87.5	1.3
MATHEMATICS & PHYSICAL SCIENCES	78.7	6.6
Computer Science	90.8	3.2
Mathematics	79.4	5.3
Chemistry	61.3	8.8
Geology & Related	80.6	16.0
Physics	44.7	8.6
Mathematics & Physical Sciences N.E.C.	92.3	8.5
Total	81.0	7.3
Weighted N	36217	29350

a. Percentages may sum to other than 100.0 due to rounding.

This pattern of findings is similar to that observed for the 1982 graduates, with the exception of graduates in engineering and applied sciences. In the 1983 survey of 1982 graduates, those with degrees in engineering and applied science had lower rates of labour force participation and higher rates of unemployment than graduates as a whole, whereas the converse was true for the 1985 graduates.

While certain patterns in the labour-force participation and unemployment rates are evident across major fields of study, there are also important differences in these rates within the major fields. For example, within the social sciences, graduates with degrees in law, and social work have higher participation rates and lower unemployment rates than those with degrees in political science, psychology and geography. A second example is shown within mathematics and physical sciences. Graduates with degrees in geology and related have higher unemployment rates than do those in computer science and mathematics. Also, graduates with degrees in physics, followed by chemistry, are less likely to be in the labour force than are other graduates from mathematics and physical sciences.

As the data show, graduates in health professions and occupations, commerce and business administration, and engineering and applied sciences stand above the graduates in other fields in terms of the percentage who are full-time employed, while those in agricultural and biological sciences, humanities, and fine and applied arts stand below the rest (see

Table 3.3.3.a). As for part-time employment, graduates in the fields of education, physical education, recreation and leisure and fine and applied arts are distinguished from the others in terms of the relatively high percentage who are part-time employed. Finally, in the full-time student category, graduates in agricultural and biological sciences, humanities, social sciences, and mathematics and physical sciences have higher than average representation, while those in health professions, and commerce and business administration, and education have lower than average representation.

TABLE 3.3.3.a

1985 Graduates by Major Field of Study and Employment Status[a]

Percentage[b]

Employment Status	USIS Major Field of Study									
	Educ. et al.	Fine & Applied Arts	Humanities	Social Sciences	Comm. & Business Administration	Agri. & Biological Sciences	Eng. & Applied Sciences	Health	Math. & Phys. Sciences	Total
Employed on a full-time basis	61.2	52.3	49.5	60.0	83.3	49.9	76.1	84.3	68.7	65.2
Employed on a part-time basis	18.5	14.9	9.6	7.6	2.8	6.5	1.6	4.9	3.3	7.9
Not employed but waiting for a job to start or awaiting recall	2.8	2.3	1.7	1.1	1.2	1.0	0.7	0.7	0.9	1.4
Not employed but looking for employment	4.4	6.8	5.7	5.4	3.7	4.2	3.7	1.1	4.3	4.4
Not employed and not looking for employment	2.0	4.6	4.0	2.3	1.1	2.1	1.1	2.0	1.3	2.1
Full-time student	11.1	19.0	29.5	23.5	7.9	36.2	16.7	7.0	21.5	18.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	5564	1086	3983	8568	4743	2297	3564	2298	3001	35104

a. Calculations do not match the methodology used in the Labour Force Survey.

b. Percentages may sum to other than 100.0 due to rounding.

3.3.4 Language First Learned to Speak

Table 3.3.4 indicates no clear relationship between the language first learned by the graduate and employment status.

TABLE 3.3.4

1985 Graduates by Employment Status and Language First Learned to Speak

Employment Status	Percentage[a] Language First Learned to Speak			
	English	French	Other	Total
Employed on a full-time basis	65.1	64.7	65.6	65.2
Employed on a part-time basis	7.9	6.7	8.4	7.9
Not employed but waiting for a job to start or awaiting recall	1.4	1.5	1.5	1.4
Not employed and looking for employment	4.2	5.8	5.2	4.4
Not employed and not looking for employment	2.2	2.4	1.7	2.1
Full-time student	19.1	19.0	17.6	18.9
Total	100.0	100.0	100.0	100.0
Weighted N	27761	2119	5078	34957

a. Percentages may sum to other than 100.0 due to rounding.

3.4 Occupation

For most people, formal education is a means of entry to an occupation. It should prove informative, then, to analyse the kinds of occupations the 1985 graduates had in the spring/summer of 1986.

3.4.1 Gender

The percentages of full-time employed men and women from the class of 1985 in each of the twenty-one most common current occupations are shown in Table 3.4.1.a. These data reveal a pattern in which men tend to be concentrated in certain occupations and women in others. For example, male graduates were more likely to be employed as computer programmers, accountants, auditors and other financial officers, administrators, lawyers, physicians and surgeons, electrical engineers and mechanical engineers, and the female graduates were more likely to be employed as elementary and kindergarten teachers, secondary teachers, other teachers, occupations in welfare and community services, social workers, secretaries and stenographers, bookkeepers and accounting clerks, and physiotherapists, occupational and other therapists.

TABLE 3.4.1.a

1985 Graduates by the Twenty-one Most Common Current Occupations and Gender, Full-time Employed

Title	Percentage[a]		
	Gender		
	Males	Females	Total
Computer programmers (2183)	10.1	4.7	7.3
Accountants, auditors, and other fin. officers (1171)	7.4	5.4	6.4
Elementary and kindergarten teachers (2731)	1.9	9.3	5.7
Secondary teachers (2733)	2.9	3.5	3.2
Occupations related to management and administration (n.e.c.)[b] (1179)	2.6	3.6	3.1
Lawyers and notaries (2343)	3.6	2.8	3.2
Nurses, graduate (except supervisors) (3131)	0.1	4.7	2.5
Teachers, unspecified (2730)	1.9	2.5	2.2
Supply teachers (2700)	0.2	0.6	0.4
Physicians and surgeons (3111)	2.9	2.0	2.4
Occupations in welfare and community services (2333)	1.0	2.8	1.9
Electrical engineers (2144)	4.3	0.3	2.2
Social workers (2331)	0.6	3.3	2.0
Secretaries and stenographers (4111)	0.1	2.9	1.6
Mechanical engineers (2147)	3.6	0.1	1.8
Bookkeeper and accounting clerks (4131)	0.8	2.1	1.5
Sales clerks, commodities (5137)	0.5	0.7	0.6

TABLE 3.4.1.a (con't)

1985 Graduates by the Twenty-one Most Common Current Occupations and Gender, Full-time Employed

Title	Percentage[a] Gender		
	Males	Females	Total
Physiotherapists, occupational and other therapists (3137)	0.3	2.6	1.5
Supervisors: sales occupations, commodities (5130)	1.6	1.3	1.5
Commercial travellers (5133)	1.8	0.8	1.3
Writers and editors, publication (3351)	0.7	1.5	1.1
Subtotal	48.9	57.5	53.4
Other occupations	51.4	42.5	46.8
Total	100.0	100.0	100.0
Weighted N	11133	12112	23245

a. Percentages may sum to other than 100.0 due to rounding.

b. n.e.c. means "not elsewhere classified".

Comparisons of the occupations of the 1982 and 1985 graduates indicate changes in the male-female ratio in a number of the most common current occupations. The ratio of males to females increased from 1982 to 1985 for computer programmers, and occupations related to management and administration and decreased for accountants, auditors, and other financial officers, lawyers and notaries, and social workers.

Table 3.4.1.b shows the distributions of full-time employed males and females by current occupation, using the CCDO major groups as categories. The data indicate that there are some clear differences between the male and female occupational distributions which can also be seen at the level of aggregated occupational categories. The largest of these is for natural sciences, engineering, and mathematics (32.0 versus 9.9 per cent), where there are disproportionate numbers of men; the second and third largest are for teaching and related fields (9.3 versus 19.7 per cent), and clerical and related (4.7 versus 14.8 per cent), where there are disproportionate numbers of women.

TABLE 3.4.1.b

1985 Graduates by Current Occupation, CCDO Major Groups, and Gender, Full-time Employed

Major Group	Percentage[a]		
	Gender		
	Males	Females	Total
Managerial, administrative, and related	19.2	15.0	17.0
Natural sciences, engineering, and mathematics	32.0	9.9	20.5
Social sciences and related fields	7.9	13.2	10.7
Religion	0.9	0.4	0.6
Teaching and related fields	9.3	19.7	14.7
Medicine and health	5.7	13.2	9.6
Artistic, literary, performing arts, and related	2.1	4.0	3.1
Sport and recreation	0.4	0.5	0.4
Clerical and related	4.7	14.8	10.0
Sales	9.0	5.4	7.1
Service	2.7	2.7	2.7
Farming, horticultural, and animal-husbandry	1.2	0.2	0.7
Fishing, hunting, trapping, & rel.	-[b]	-[b]	-[b]
Forestry and logging	0.1	0.1	0.1
Mining and quarrying	0.1	-	0.1
Processing	0.5	0.1	0.3
Machining and related	0.1	-	0.1

TABLE 3.4.1.b (con't)

1985 Graduates by Current Occupation, CCDO Major Groups, and Gender, Full-time Employed

Major Group	Percentage[a]		
	Gender		
	Males	Females	Total
Product fabricating, assembling and repairing	0.9	0.3	0.6
Construction trades	1.2	0.1	0.6
Transport-equipment operating	0.6	0.1	0.3
Material-handling and related	0.2	-[b]	0.1
Other crafts and equipment-operating	0.3	0.2	0.2
Other occupations	0.7	0.3	0.5
Total[c]	100.0	100.0	100.0
Weighted N	11133	12112	23245

a. Percentages may sum to other than 100.0 due to rounding.

b. Less than 0.1 per cent.

c. This list pertains to all full-time employed graduates.

The differences between men and women graduates in their occupational distributions changed little between 1982 and 1985. There are, however, three exceptions. The male-female ratio has decreased slightly for managerial, administrative and related occupations, and social sciences and related fields and increased for occupations in teaching and related fields.

3.4.2 Level of Degree or Diploma

As Table 3.4.2 shows, although there is considerable overlap, holders of different levels of degrees or diplomas often compete in quite different markets for jobs. Holders of three- and four-year bachelor's degrees tend to be relatively unspecialized. For example, the largest two occupational categories for three-year degree holders were clerical occupations (22.9 per cent) and managerial, administrative, and related occupations (18.7 per cent) at the time of the survey. The largest two categories for holders of four-year bachelor's degrees were managerial, administrative, and related (18.0 per cent) and natural sciences, engineering, and mathematics (33.0 per cent).

TABLE 3.4.2

1985 Graduates Employed Full-time by CCDO Major Group Occupations and Level of Degree or Diploma

Major Group	Percentage[a] Level of Degree or Diploma								
	Diploma	3-year Bachelor's	4-year Bachelor's	1-year B.Ed.	First Professional	Master's	Ph.D.	Other	Total
Managerial, administrative and related occupations	13.8	18.7	18.0	2.2	0.9	33.8	4.1	16.6	17.0
Occupations in natural sciences, engineering, and mathematics	17.1	10.7	33.0	1.1	-	16.9	26.7	8.0	20.4
Occupations in social sciences and related fields	4.9	8.2	7.2	2.5	41.0	19.6	13.7	8.5	10.7
Occupations in religion	-	0.6	0.1	0.1	4.0	1.3	0.9	-	0.6
Teaching and related occupations	7.2	9.1	4.7	86.1	0.7	16.9	52.8	7.5	14.7
Occupations in medicine and health	1.9	2.3	10.6	0.6	52.7	3.6	1.7	35.7	9.6
Artistic, literary, performing arts, and related occupations	12.6	3.6	3.2	0.9	0.1	1.3	-	11.9	3.1
Occupations in sport and recreation	0.2	0.6	0.5	0.4	-	0.1	-	-	0.4
Clerical and related occupations	12.3	22.9	9.1	2.8	0.2	1.4	-	4.4	10.0
Sales occupations	11.9	12.6	7.4	1.0	0.1	3.7	-	7.4	7.1
Service occupations	2.4	6.0	2.5	1.1	0.1	0.5	-	-	2.7
Other occupations	15.8	4.7	3.6	1.1	0.1	1.0	-	-	3.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1035	4934	10668	2105	1610	2616	246	54	23269

a. Percentages may sum to other than 100.0 due to rounding.

More concentrated than any others were holders of one-year Bachelor of Education degrees, 86.1 per cent of whom were in the category of teaching and related occupations. Holders of first professional degrees were concentrated almost entirely in the categories of social sciences and related fields, and medicine and health. Those persons who had earned master's degrees were also fairly highly concentrated, with 33.8 per cent in the managerial, administrative, and related category, and 36.5 per cent in either social sciences or teaching. Some 52.8 per cent of those with doctoral degrees were in the category of teaching and related, with the remainder distributed across the categories of managerial, administrative, and related, natural sciences, engineering, and mathematics, and social sciences and related.

Comparisons between the findings for the 1982 and 1985 graduates indicate very similar occupational distributions within degree or diploma levels with one major exception: 1985 Ph.D. holders were much more likely than 1982 Ph.D. holders to be employed in teaching and related occupations, and less likely than their 1982 counterparts to be employed in managerial, administrative and related occupations and occupations in the social sciences and related fields.

3.4.3 Major Field of Study

Table 3.4.3 presents the occupational distribution of the 1985 graduates for each USIS major field of study. In five of the fields (education, physical education, recreation and leisure, commerce and business administration, engineering and applied sciences, health professions and occupations, and mathematics and physical sciences), the majority of graduates are found in a single occupational category (e.g., 92.3 per cent of graduates in health professions and occupations have occupations in medicine and health).

TABLE 3.4.3

1985 Graduates Employed Full-time by CCDO Major Group Occupations and USIS Major Fields of Study

Major Group	Percentage[a] USIS Major Field of Study									
	Educ. et al.	Fine & Applied Arts	Humanities	Social Sciences	Comm. & Business Administration	Agri. & Biological Sciences	Eng. & Applied Sciences	Health	Math. & Phys. Sciences	Total
Managerial, administrative & related occupations	5.8	6.2	12.3	15.2	56.6	5.2	5.3	2.5	7.0	17.0
Occupations in natural sciences, engineering and mathematics	1.2	0.8	2.2	3.3	8.0	27.8	83.4	0.8	74.5	20.5
Occupations in social sciences & related fields	5.2	4.3	10.2	36.2	3.3	3.1	0.1	0.3	0.7	10.7
Occupations in religion	0.1	-	5.9	0.2	0.1	-	-	-	0.1	0.6
Teaching & related occupations	73.2	9.6	9.6	7.5	1.3	4.2	0.8	2.1	3.4	14.7
Occupations in medicine and health	2.5	0.9	1.0	1.3	0.8	18.8	-	92.3	0.2	9.6
Artistic, literary, performing arts & related occupations	0.9	39.5	15.5	1.6	0.6	1.2	0.1	0.3	0.3	3.1
Occupations in sport and recreation	1.9	0.7	0.1	0.3	-[b]	0.2	-	-	0.1	0.4
Clerical and related occupations	3.6	15.6	26.0	16.6	11.7	8.4	1.0	0.4	5.3	10.0
Sales occupations	2.0	10.1	8.3	9.8	12.4	11.3	4.6	1.1	3.9	7.1

TABLE 3.4.3 (con't)

1985 Graduates Employed Full-time by CCDO Major Group Occupations and USIS Major Fields of Study

Percentage[a]

Employment Status	USIS Major Field of Study									
	Educ. et al.	Fine & Applied Arts	Humanities	Social Sciences	Comm. & Business Administration	Agri. & Biological Sciences	Eng. & Applied Sciences	Health	Math. & Phys. Sciences	Total
Service occupations	2.3	3.3	4.7	4.8	2.4	3.7	0.5	0.2	1.4	2.7
Other occupations	1.3	9.0	4.2	3.3	2.8	16.2	4.3	0.1	3.4	3.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	3474	578	2057	5187	4016	1161	2740	1956	2080	23250

a. Percentages may sum to other than 100.0 due to rounding.
b. Less than 0.1 per cent.

In four other fields, however, graduates are less highly concentrated occupationally. While fine and applied arts graduates tend to be found in artistic, literary, or performing arts occupations, and humanities, social sciences, and graduates in agricultural and biological sciences tend to be found in clerical occupations, social science occupations, and occupations in natural science respectively, the majority in each case is distributed across a number of other categories. For example, 26.0 per cent of the graduates in humanities reported having occupations of a clerical nature; 15.5 per cent reported occupations in the artistic, literary, or performing arts; 10.2 per cent were involved in teaching; 12.3 per cent were engaged in managerial or administrative work; and 10.2 per cent had occupations in the social sciences. For graduates in humanities, then, the five largest occupational categories account for less than 75 per cent of their number.

These findings replicate those found for the 1982 graduates.

3.4.4 Language First Learned to Speak

Table 3.4.4 shows differences in the occupations held by 1985 graduates by the language they first learned to speak. The data show that, compared to graduates as a whole, those who learned French as a first language were more likely to be employed in occupations in social science and teaching fields, and less likely to be employed in occupations in natural sciences, engineering and mathematics, medicine and health, and

clerical and sales occupations. Also, compared to all graduates, graduates who learned a language other than French or English as their first language were more likely employed in natural sciences, engineering, and mathematics occupations, and less likely to be employed in social science occupations.

TABLE 3.4.4

1985 Graduates by CCDO Major Group Occupations and Language First Learned to Speak, Full-time Employed

Major Group	Percentage[a] Language First Learned to Speak			
	English	French	Other	Total
Managerial, administrative, and related	17.0	18.3	16.7	17.0
Natural sciences, engineering, and mathematics	19.4	15.4	28.3	20.4
Social sciences and related fields	11.0	15.5	7.0	10.7
Religion	0.6	1.5	0.5	0.6
Teaching and related fields	14.5	21.7	13.0	14.7
Medicine and health	10.0	6.1	9.2	9.7
Artistic, literary, performing arts, and related	3.0	4.6	2.7	3.1
Sport and recreation	0.5	0.2	-	0.4
Clerical and related	9.9	6.9	11.7	10.0
Sales	7.6	4.3	5.8	7.1
Service	2.8	3.3	1.6	2.7
Other occupations	3.7	2.1	3.8	3.6
Total	100.0	100.0	100.0	100.0
Weighted N	18393	1412	3355	23160

a. Percentages may sum to other than 100.0 due to rounding.

3.4.5 Parents' Main Occupations in 1985

As shown in Section 3.1, father's and mother's main occupation is related to the 1985 graduates' field of study. In this section, the parents' main occupations in 1986 are related to the 1985 graduates' current occupations in 1986.

The data in Tables 3.4.5.a and 3.4.5.b clearly show a relationship between the parents' occupations, on the one hand, and graduates' occupations, on the other. Graduates were relatively more likely to be in the same occupational category as their father or mother than in any other of the occupational categories.

TABLE 3.4.5.a

Full-Time Employed 1985 Graduates, Current Occupations, CCDO Major Group by Father's Occupation, CCDO Major Group

Percentage[a]

Graduates' Occupations Major Group	Father's Occupation Major Group												
	Manag.	Nat.Sc.	Soc.Sc.	Relig.	Teach.	Med.	Art.	Sport.	Cler.	Sales	Serv.	Other Occ.	Total
Managerial, administrative & related occupations	17.5	14.8	14.5	9.6	12.8	12.1	15.8	14.2	15.1	16.7	16.2	15.2	15.5
Occupations in natural sciences, engineering and mathematics	18.0	28.8	11.9	14.5	20.8	14.8	20.0	-	18.3	14.0	23.5	19.1	19.2
Occupations in social sciences & related fields	9.2	8.2	21.6	14.6	8.9	9.8	7.2	14.3	9.6	10.6	8.8	9.2	9.6
Occupations in religion	0.2	0.3	0.4	3.3	0.9	-	-	-	0.8	0.1	0.5	0.2	0.3
Teaching & related occupations	12.5	8.0	11.0	25.8	15.6	12.3	17.3	38.8	18.1	12.3	14.7	15.1	13.7
Occupations in medicine and health	8.5	12.3	8.9	12.2	11.7	19.8	4.9	10.9	7.1	9.3	8.1	9.0	9.7
Artistic, literary, performing arts & related occupations	4.2	3.0	3.3	1.3	4.7	4.5	9.8	-	2.2	3.3	3.3	2.8	3.4
Occupations in sport and recreation	0.8	0.4	0.4	1.1	0.8	0.5	0.9	-	0.7	1.6	0.4	0.6	0.7

TABLE 3.4.5.a (con't)

Full-Time Employed 1985 Graduates, Current Occupations, CCDO Major Group
by Father's Occupation, CCDO Major Group

Graduates' Occupations Major Group	Percentage[a] Father's Occupation Major Group												
	Manag.	Nat.Sc.	Soc.Sc.	Relig.	Teach.	Med.	Art.	Sport.	Cler.	Sales	Serv.	Other Occ.	Total
Clerical and related occupations	13.0	11.2	11.1	9.9	9.6	10.5	11.6	10.9	15.5	12.7	10.5	11.9	11.9
Sales occupations	9.4	6.2	9.4	2.2	6.3	9.6	4.9	10.9	7.1	12.7	5.7	8.0	8.3
Service occupations	3.6	4.1	4.2	3.2	4.7	2.4	4.5	-	3.0	2.4	5.4	3.1	3.5
Other occupations	3.2	2.7	3.2	2.4	3.1	3.6	3.1	-	2.4	4.4	2.9	5.7	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	3834	1651	502	173	1177	779	204	17	599	1430	941	6732	18037

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 3.4.5.b

Full-Time Employed 1985 Graduates, Current Occupations, CCDO Major Group
by Mother's Occupation, CCDO Major Group

[a] Percentage

Graduates' Occupations Major Group	Mother's Occupation Major Group												
	Manag.	Nat.Sc.	Soc.Sc.	Relig.	Teach.	Med.	Art.	Sport.	Cler.	Sales	Serv.	Other Occ.	Total
Managerial, administrative & related occupations	17.4	6.4	12.3	14.7	12.5	14.6	13.3	34.6	15.2	15.0	12.1	14.9	14.6
Occupations in natural sciences, engineering and mathematics	17.8	32.7	17.0	6.4	17.7	17.8	24.7	25.0	19.1	17.1	22.8	19.0	18.8
Occupations in social sciences & related fields	12.3	3.4	13.8	14.7	9.6	12.0	12.1	16.9	9.1	11.3	7.9	10.0	10.3
Occupations in religion	0.2	-	-	-	0.4	0.1	-	-	0.2	0.4	0.3	0.5	0.3
Teaching & related occupations	12.9	-	11.9	13.9	19.7	10.4	13.2	-	13.9	11.2	10.8	13.6	13.9
Occupations in medicine and health	8.7	10.4	8.1	23.3	10.7	14.9	9.9	-	10.4	10.3	7.3	8.7	10.3
Artistic, literary, performing arts & related occupations	4.3	3.7	4.7	-	4.2	3.4	5.5	-	3.3	4.6	3.1	2.4	3.6
Occupations in sport and recreation	0.7	3.3	1.5	-	1.0	0.7	0.9	-	0.7	0.3	0.8	0.6	0.7

TABLE 3.4.5.b (con't)

Full-Time Employed 1985 Graduates, Current Occupations, CCDO Major Group
by Mother's Occupation, CCDO Major Group

[a] Percentage

Graduates' Occupations Major Group	Mother's Occupation Major Group												
	Manag.	Nat.Sc.	Soc.Sc.	Relig.	Teach.	Med.	Art.	Sport.	Cler.	Sales	Serv.	Other Occ.	Total
Clerical and related occupations	11.2	26.3	13.0	8.3	9.9	10.7	7.3	7.9	12.2	12.2	13.7	13.3	11.9
Sales occupations	8.7	3.7	9.2	-	6.4	7.5	9.0	7.9	8.4	10.8	5.7	8.9	8.2
Service occupations	3.3	-	3.8	6.4	5.0	3.5	2.0	7.7	4.2	3.3	3.1	3.2	3.8
Other occupations	2.3	10.1	4.8	12.5	2.7	4.2	2.0	-	3.4	3.4	4.4	5.0	3.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	930	56	502	29	1381	1356	197	23	3816	1125	751	1574	11741

a. Percentages may sum to other than 100.0 due to rounding.

3.5 Industry

The following subsections analyse the 1985 graduates with respect to their distribution across industrial divisions in the spring of 1986. This is done in two distinct but related ways. First, industries are classified according to the Standard Industrial Classification codes of Statistics Canada. Second, they are grouped according to whether they belong to the public or the private sector.

3.5.1 Gender

Table 3.5.1.a shows the distributions of the men and women spring graduates across the set of SIC categories. These data indicate that the distribution of male and female 1985 graduates differ for a number of the industrial divisions. In particular, the males were relatively more likely than the females to be employed in manufacturing and business service industries. The female graduates were relatively more likely than the males to be employed in educational and health and social service industries.

Comparisons between the findings for the 1982 and 1985 graduates indicate some changes in male-female ratios within certain industries. In particular, the male-female ratio has decreased in manufacturing industries, business services and health and social service industries and increased in educational services.

TABLE 3.5.1.a

1985 Graduates by SIC Division and Gender, Full-time Employed

SIC Division	Percentage[a]		
	Gender		
	Males	Females	Total
Agricultural & rel. service ind.	1.5	0.7	1.1
Fishing & trapping industries	0.1	-	-[b]
Logging & forestry industries	0.2	0.1	0.1
Mining, quarrying & oil well ind.	1.7	0.5	1.0
Manufacturing industries	23.2	9.8	16.2
Construction industries	2.6	0.5	1.5
Transportation & storage ind.	1.3	1.0	1.1
Communication & other utility ind.	3.8	2.1	2.9
Wholesale trade industries	1.8	1.1	1.4
Retail trade industries	3.9	4.5	4.2
Finance and insurance industries	6.9	7.7	7.3
Real-estate operator & insurance-agent industries	0.8	0.5	0.6
Business service industries	18.3	12.1	15.1
Government service industries[c]	9.7	9.7	9.7
Educational service industries	11.5	23.1	17.6
Health & social service industries	6.7	19.7	13.5
Accommodation, food & beverage service industries	1.3	2.0	1.6

TABLE 3.5.1.a (continued)

SIC Division	Percentage[a]		
	Gender		
	Males	Females	Total
Other industries	5.0	4.9	5.0
Total	100.0	100.0	100.0
Weighted N	11105	12086	23191

a. Percentages may sum to other than 100.0 due to rounding.

b. Less than 0.1 per cent.

c. Employees of Crown Corporations are distributed across the SIC divisions according to type of industry.

Table 3.5.1.b provides a breakdown of the 1985 respondents according to whether they were employed in the public or the private sector at the time of the survey. In this case, 32.4 per cent of the men and 54.7 per cent of the women were employed in the public sector. These figures indicate a slight increase since 1982 in the proportion of male graduates employed in the public sector.

TABLE 3.5.1.b

1985 Graduates by Industry and Gender, Full-time Employed

Industrial Sector	Percentage[a] Gender		
	Males	Females	Total
Public sector[b]	32.4	54.7	44.0
Private sector	67.6	45.3	56.0
Total	100.0	100.0	100.0
Weighted N	11108	12090	23197

a. Percentages may sum to other than 100.0 due to rounding.

b. See Section 2.10 for the definition of "public sector" used in the analysis of this survey.

3.5.2 Level of Degree or Diploma

As Table 3.5.2.a shows, across the several degree or diploma levels, there is considerable variation in the extent to which the 1985 graduates were concentrated within industrial categories. Holders of one-year Bachelor of Education degrees were the most highly concentrated of all, with 85.6 per cent located in the educational service industry. Disregarding the "other" category, the next highest level of industrial concentration was found among the holders of doctoral degrees, 56.5 per cent of whom were also located in educational service. Next in order of concentration were holders of first professional degrees, 43.7 per cent of whom were located in health and social service and 36.7 per cent of whom were located in business service.

TABLE 3.5.2.a

1985 Graduates by Level of Degree or Diploma and SIC Division, Full-time Employed

Percentage[a]

SIC Division	Level of Degree or Diploma								
	Diploma	3-year Bachelor's	4-year Bachelor's	1-year B.Ed.	First Professional	Master's	Ph.D.	Other	Total
Agricultural & rel. serv. ind.	4.8	0.5	0.7	0.1	5.6	0.4	-	-	1.1
Fishing & trapping industries	-	-b	-b	-	-	-	0.8	-	-b
Logging & forestry industries	0.5	0.1	0.2	0.1	-	0.1	-	-	0.1
Mining & quarrying & oil well ind.	-	0.7	1.7	0.1	-	0.9	-	-	1.0
Manufacturing industries	20.1	14.1	22.7	1.7	0.3	15.0	6.1	15.3	16.3
Construction industries	4.4	1.8	1.7	0.4	0.1	0.5	-	4.0	1.5
Trans. & storage industries	1.4	1.7	1.2	0.3	0.1	0.8	0.8	-	1.1
Communication & other utility ind.	4.7	3.3	3.4	0.3	-	3.4	1.8	-	2.9
Wholesale trade industries	3.0	1.7	1.7	0.2	-	1.4	-	-	1.4
Retail trade industries	7.2	8.3	4.1	1.2	-	1.2	0.9	8.0	4.2
Fin. and insurance industries	6.3	13.0	6.9	0.9	0.4	8.6	0.9	3.9	7.3
Real-estate oper. & ins.-agent ind.	0.8	1.0	0.6	-	-	0.9	-	-	0.6
Business service industry	12.3	11.0	17.9	0.6	36.7	11.5	7.3	12.2	15.1
Government service industry	9.7	12.3	9.3	3.5	5.3	14.2	12.5	-	9.7
Educational service industry	9.0	12.2	7.3	85.6	1.4	24.5	56.5	3.6	17.6

TABLE 3.5.2.a (con't)

1985 Graduates by Level of Degree or Diploma and SIC Division, Full-time Employed

Percentage[a]

Employment Status	Level of Degree or Diploma								
	Diploma	3-year Bachelor's	4-year Bachelor's	1-year B.Ed.	First Professional	Master's	Ph.D.	Other	Total
Health & social service industry	5.4	8.5	14.4	2.7	43.7	12.2	9.8	35.6	13.5
Accomm., food & bev. serv. ind.	1.5	3.1	1.9	0.4	0.3	0.2	-	-	1.6
Other industries	8.7	6.7	4.3	1.9	6.0	4.5	2.7	17.3	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1032	4922	10644	2103	1605	2606	246	54	23212

a. Percentages may sum to other than 100.0 due to rounding.

b. Less than 0.1 per cent.

By contrast, holders of master's degrees were distributed across several categories, the largest of which were educational service (24.5 per cent), government service (14.2 per cent), and manufacturing (15.0 per cent). Holders of four-year bachelor's degrees were likewise not very highly concentrated within industrial sectors, with 17.9 per cent in business service, 22.7 per cent in manufacturing, 14.4 per cent in health and social service, and 9.3 per cent in government service. Holders of three-year bachelor's degrees were also quite widely scattered, with 12.2 per cent in educational service, 12.3 per cent in government service, and 14.1 per cent in manufacturing. The same was true of diploma holders, of whom 20.1 per cent were in manufacturing, 12.3 per cent in business services, 9.7 per cent in government service, and 9.0 per cent in educational service.

A good deal of variation exists in the public versus private sector location of graduates at different degree levels, as can be seen in Table 3.5.2.b. Holders of one-year Bachelor of Education, master's, and doctoral degrees were found disproportionately in the public sector. Holders of diplomas, first professional degrees, and three- and four-year bachelor's degrees, however, were found predominantly in the private sector.

TABLE 3.5.2.b

1985 Graduates by Level of Degree or Diploma and Industry, Full-time Employed

Industrial Sector	Percentage[a] Level of Degree or Diploma								
	Diploma	3-year Bachelor's	4-year Bachelor's	1-year B.Ed.	First Professional	Master's	Ph.D.	Other	Total
Public sector[b]	31.2	37.6	35.6	92.0	40.6	55.3	82.3	39.2	44.0
Private sector	68.8	62.4	64.4	8.0	59.4	44.7	17.7	60.8	56.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1034	4922	10648	2103	1605	2606	246	54	23218

a. Percentages may sum to other than 100.0 due to rounding.

b. See Section 2.10 for the definition of "public sector" used in the analysis of this survey.

Comparisons between the findings for the 1982 and 1985 graduates reveal very similar distributions across industrial sectors by level of degree or diploma, with one major exception. The 1985 doctoral graduates were more likely than the 1982 doctoral graduates to be employed in educational service industries (the public sector) and less likely to be employed in manufacturing industries (the private sector).

3.5.3 Major Field of Study

Graduates in some fields of study are quite highly concentrated in a small number of industrial divisions, while graduates in other fields are not. Table 3.5.3.a shows how the respondents in each of the different USIS major fields of study were distributed across the set of SIC categories.

TABLE 3.5.3.a

1985 Graduates by USIS Major Field of Study and SIC Division, Full-time Employed

SIC Division	Educ. & Rec.	Fine & Applied Arts	Humanities	Social Sciences	Comm. & Business Admin.	Agri. & Biological Science	Eng. & Applied Sciences	Health	Math. & Phys. Sciences	Total
	Percentage[a]									
	USIS Major Field of Study									
Agricultural & rel. serv. ind.	0.1	-	0.4	0.4	0.2	16.3	0.1	0.1	0.5	1.1
Fishing & trapping industries	-	-	0.1	-	-	0.2	0.1	-	-	-[b]
Logging & forestry industries	0.1	-	0.1	-	-[b]	0.3	0.7	-	0.1	0.1
Mining & quarrying & oil well ind.	0.1	-	0.2	0.3	0.8	0.5	3.7	-	3.9	1.0
Manufacturing industries	2.4	15.9	14.9	8.5	21.4	16.5	45.3	1.1	26.2	16.3
Construction industries	0.4	1.8	0.9	1.4	1.4	1.6	5.0	-	0.8	1.5
Trans. & storage industries	0.3	0.4	2.1	1.4	1.4	0.7	1.6	-	1.0	1.1
Communication & other utility ind.	0.4	2.1	4.7	1.6	3.4	1.3	7.4	-	5.7	2.9
Wholesale trade industries	0.3	2.7	1.4	1.3	2.6	2.9	1.8	-	1.4	1.4
Retail trade industries	1.4	12.8	5.6	6.0	4.8	5.2	0.8	5.3	2.5	4.2
Fin. and insurance industries	1.4	2.3	6.5	9.8	15.9	3.2	1.0	0.1	14.1	7.3
Real-estate oper. & ins.-agent ind.	0.1	0.4	1.3	0.8	1.3	-	0.3	-	0.5	0.6
Business service industry	1.1	16.0	8.7	18.8	27.2	4.1	21.4	0.3	23.4	15.1
Government service industry	5.6	4.3	11.5	16.7	9.1	11.0	7.5	3.5	8.4	9.7
Educational service industry	74.4	14.5	19.1	9.1	2.7	13.4	1.2	4.3	7.5	17.5

TABLE 3.5.3.a (con't)

1985 Graduates by USIS Major Field of Study and SIC Division, Full-time Employed

	Percentage[a]									
	USIS Major Field of Study									
SIC Division	Educ. & Rec.	Fine & Applied Arts	Humanities	Social Sciences	Comm. & Business Admin.	Agri. & Biological Science	Eng. & Applied Sciences	Health	Math. & Phys. Sciences	Total
Health & social service industry	6.3	3.8	4.1	16.8	2.4	15.1	0.1	83.2	1.5	13.5
Accomm., food & bev. serv. ind.	1.1	2.5	3.4	2.1	2.4	2.5	0.1	0.2	0.8	1.6
Other service industries	4.5	20.5	14.9	5.0	3.0	5.2	1.9	1.7	1.8	5.0
Total	100.0	106.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	3467	578	2051	5181	3993	1159	2736	1956	2071	23194

a. Percentages may sum to other than 100.0 due to rounding.

b. Less than 0.1 per cent.

Among the 1985 spring graduates, those in health professions and occupations were the most highly concentrated in terms of industry, with 83.2 per cent being located in the health and social service industries at the time of the survey. The next most highly concentrated field of study was education, physical education, recreation and leisure, of which 74.4 per cent of the graduates were employed in educational service. As well, 45.3 per cent of engineering and applied science graduates were employed in manufacturing industries. In each of the remaining fields, the most common industrial category accounted for only about one-quarter or less of the graduates, ranging from 27.2 per cent of commerce and business administration graduates in business service industries to 20.5 per cent of the fine and applied arts graduates in other service industries.

Examining the relationship between major field of study and industrial location in terms of the public and private sectors shows that some fields are quite highly concentrated in one sector or the other, as the data in Table 3.5.3.b indicate. Graduates in the field of education, physical education, and recreation and leisure are very highly concentrated in the public sector, as are graduates in health professions and occupations. Graduates in commerce and business administration, fine and applied arts, mathematics and physical sciences, and engineering and applied sciences are, on the other hand, more highly concentrated in the private sector.

TABLE 3.5.3.b

1985 Graduates by USIS Major Field of Study and Industrial Sector, Full-time Employed

Industrial Sector	Percentage[a] USIS Major Field of Study									
	Educ. & Rec.	Fine & Applied Arts	Humanities	Social Sciences	Comm. & Business Administration	Agri. & Biological Sciences	Eng. & Applied Sciences	Health Prof. & Occup.	Math. & Phys. Sciences	Total
Public sector[b]	86.9	24.2	40.6	44.8	19.7	40.2	19.0	82.0	24.9	44.0
Private sector	13.1	75.8	59.4	55.2	80.3	59.8	81.0	18.0	75.1	56.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	3467	578	2051	5183	3996	1161	2736	1956	2071	23200

a. Percentages may sum to other than 100.0 due to rounding.

b. See Section 2.10 for the definition of "public sector" used in the analysis of this survey.

Comparisons between the experiences of the 1982 and 1985 graduates indicate changes in the distribution of graduates in engineering and applied sciences across industrial divisions. Specifically, relatively more 1985 than 1982 engineering and applied science graduates were employed in manufacturing and business service industries, and relatively fewer in communication and other utility industries, government and educational service industries. As for the public versus the private sectors, 1985 engineering and applied science graduates were more likely than their 1982 counterparts to be employed in the private sector of the economy.

3.5.4 Language First Learned to Speak

Graduates who learned to speak a language other than English as a first language differ in the industries in which they work from those who first learned to speak English. Table 3.5.4.a shows that French-speaking graduates were relatively more likely than English-speaking graduates to work in government or educational service and less likely to work in manufacturing, retail trade, finance and insurance, business service and health and social service. Graduates who first learned a language other than English or French were relatively more likely to be employed in manufacturing, finance and insurance, and less likely to be employed in government, educational or health and social service industries.

TABLE 3.5.4.a

1985 Graduates by SIC Division and Language First Learned to Speak, Full-time Employed

SIC Division	Percentage[a] Language First Learned to Speak			
	English	French	Other	Total
Agricultural & rel. service ind.	1.2	0.1	0.7	1.0
Fishing & trapping industries	-[b]	-	-	-[b]
Logging & forestry industries	0.2	-	0.1	0.1
Mining, quarrying & oil well ind.	1.1	0.6	0.8	1.0
Manufacturing industries	16.0	11.0	19.6	16.3
Construction industries	1.4	0.7	2.1	1.5
Transportation & storage ind.	1.1	0.9	1.3	1.1
Communication & other utility ind.	3.0	3.3	2.3	2.9
Wholesale trade industries	1.5	0.8	1.4	1.5
Retail trade industries	4.2	2.4	4.9	4.2
Finance and insurance industries	7.3	3.8	9.1	7.3
Real-estate operator & insurance-agent industries	0.5	0.4	1.1	0.6
Business service industries	15.1	13.2	15.6	15.1
Government service industries[c]	9.3	19.4	7.6	9.7
Educational service industries	17.3	25.4	15.8	17.6
Health & social service industries	14.0	10.7	12.1	13.5
Accommodation, food & beverage service industries	1.7	1.6	1.3	1.6

TABLE 3.5.4.a (continued)

SIC Division	Percentage[a] Language First Learned to Speak			
	English	French	Other	Total
Other industries	5.0	5.7	4.2	4.9
Total	100.0	100.0	100.0	100.0
Weighted N	18358	1410	3343	23110

a. Percentages may sum to other than 100.0 due to rounding.

b. Less than 0.1 per cent.

c. Employees of Crown Corporations are distributed across the SIC divisions according to type of industry.

The data in Table 3.5.4.b indicate that graduates who first learned to speak French were relatively more likely to be employed in the public sector than were graduates as a whole, and that graduates who first learned a language other than English or French were more likely to be employed in the private sector.

TABLE 3.5.4.b

1985 Graduates by Industrial Sector and
Language First Learned to Speak, Full-time Employed

Industrial Sector	Percentage[a] Language First Learned to Speak			
	English	French	Other	Total
Public	44.0	60.0	37.4	44.0
Private	56.0	40.0	62.6	56.0
Total	100.0	100.0	100.0	100.0
Weighted N	18362	1412	3343	23117

a. Percentages may sum to other than 100.0 due to rounding.

3.6 Earnings

To provide some perspective on early career earnings patterns, the starting and current wages or salaries for the full-time employed graduates have been examined. The average starting and current wages or salaries for full-time employed graduates were $20,825 and $24,319 respectively. These figures (adjusted for inflation) are very similar to the starting and current salaries for the 1982 full-time employed graduates.

3.6.1 Gender

Table 3.6.1.a shows the distributions of the full-time employed male and female graduates across a range of starting salary or wage levels, while Table 3.6.1.b provides this same information for current salaries or wages.

With the exception that the current earnings of the graduates are about 17 per cent higher on the average than their initial earnings, the data in Table 3.6.1.a and Table 3.6.1.b tell a similar story, that is, men tend to earn more on the average than women. These differences are such that the average earnings for women are about 88 per cent of those for the men. This figure is up from the 85 per cent found for the 1982 graduates.

TABLE 3.6.1.a

1985 Graduates by Level of Starting Wage or Salary and Gender, Full-time Employed

Level of Starting Wage or Salary	Percentage[a]		
	Gender		
	Males	Females	Total
Less than $10,000	7.1	13.0	10.2
$10,000 to $13,999	7.6	13.1	10.5
$14,000 to $17,999	15.1	19.4	17.3
$18,000 to $21,999	18.5	17.3	17.9
$22,000 to $25,999	23.0	19.4	21.1
$26,000 to $29,999	16.6	11.8	14.1
$30,000 to $34,999	5.6	3.4	4.4
$35,000 to $39,999	2.1	1.1	1.6
$40,000 or more	4.3	1.6	2.9
Total	100.0	100.0	100.0
Mean[b]	$22250	$19513	$20825
Weighted N	10843	11780	22623

a. Percentages may sum to other than 100.0 due to rounding.

b. For each category range, the midpoint of that category is multiplied by the weighted N for that category. And, for the categories "less than $10,000" and "$40,000 or more", these monetary values are multiplied by the weighted N for these categories. These values are then summed across the set of categories and their sum is divided by the total weighted N to derive the mean salary.

TABLE 3.6.1.b

1985 Graduates by Level of Current Wage or Salary and Gender, Full-time Employed

Level of Current Wage or Salary	Percentage[a]		
	Gender		
	Males	Females	Total
Less than $10,000	2.6	4.9	3.8
$10,000 to $13,999	4.3	8.0	6.2
$14,000 to $17,999	10.3	17.3	13.9
$18,000 to $21,999	15.0	18.2	16.7
$22,000 to $25,999	20.1	20.1	20.1
$26,000 to $29,999	19.5	15.9	17.6
$30,000 to $34,999	13.0	6.4	9.6
$35,000 to $39,999	4.7	3.2	3.9
$40,000 or more	10.5	5.9	8.1
Total	48.1	51.9	100.0
Mean[b]	$25959	$22796	$24319
Weighted N	10372	11169	21541

a. Percentages may sum to other than 100.0 due to rounding.

b. For each category range, the midpoint of that category is multiplied by the weighted N for that category. And, for the categories "less than $10,000" and "$40,000 or more", these monetary values are multiplied by the weighted N for these categories. These values are then summed across the set of categories and their sum is divided by the total weighted N to derive the mean salary.

3.6.2 Level of Degree or Diploma

Table 3.6.2.a shows the starting earnings distribution for each degree or diploma level for the 1985 graduates; Table 3.6.2.b shows this information for current salaries. Except for the starting salaries of diploma holders, the data in Table 3.6.2.a and Table 3.6.2.b reveal a consistent relationship between level of degree or diploma and amount of earnings: the higher the degree level, the higher the average earnings with holders of doctoral degrees earning about 50 per cent more than holders of diplomas.

The overall increase from starting to current salary of 17 per cent was not entirely uniform across degree levels. Holders of first professional degrees showed an increase of about 8 per cent, while holders of one-year Bachelor of Education degrees had current earnings which were about 16 per cent above their initial earnings. By contrast, holders of three-year bachelor's and doctoral degrees had current earnings levels which were on the order of 20-25 per cent higher than their starting ones. This may reflect a greater tendency for holders of three-year bachelor's degrees to enter the labour force in entry-level positions and then to advance more rapidly with regard to earnings than do holders of professional or Bachelor of Education degrees. A similar pattern of findings was noted in the 1983 survey.

TABLE 3.6.2.a

1985 Graduates by Level of Starting Wage or Salary and Level of Degree or Diploma, Full-time Employed

Percentage[a]

Level of Starting Wage or Salary	Level of Degree or Diploma								
	Diploma	3-year Bachelor's	4-year Bachelor's	1-year B.Ed.	First Professional	Master's	Ph.D.	Other	Total
Less than $10,000	14.0	10.8	7.2	11.6	1.3	9.4	4.5	8.9	10.2
$10,000 to $13,999	19.8	17.2	8.9	6.2	9.8	5.4	1.9	8.0	10.5
$14,000 to $17,999	21.3	24.5	10.8	7.9	11.0	8.5	4.6	15.6	17.3
$18,000 to $21,999	20.1	18.6	19.1	17.6	20.9	9.6	12.6	19.9	17.9
$22,000 to $25,999	12.9	11.0	23.0	44.8	21.3	14.5	22.7	15.8	21.1
$26,000 to $29,999	4.1	3.5	18.2	9.4	22.7	19.5	18.0	19.8	14.1
$30,000 to $34,999	3.4	2.3	3.5	1.2	1.7	16.1	12.0	7.9	4.4
$35,000 to $39,999	0.9	1.2	0.7	0.4	1.7	6.3	9.9	4.0	1.6
$40,000 or more	3.6	2.0	0.6	1.1	9.6	10.6	13.0	-	2.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	18319	17382	20865	21040	23655	25718	27431	21846	20819
Weighted N	1011	4703	10517	2068	1500	2478	236	54	22646

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 3.6.2.b

1985 Graduates by Level of Current Wage or Salary and Level of Degree or Diploma, Full-time Employed

Level of Current Wage or Salary	Percentage[a] Level of Degree or Diploma								
	Diploma	3-year Bachelor's	4-year Bachelor's	1-year B.Ed.	First Professional	Master's	Ph.D.	Other	Total
Less than $10,000	5.5	6.5	3.6	3.5	0.9	1.1	-	4.5	3.8
$10,000 to $13,999	11.3	11.8	5.2	3.0	7.1	1.0	-	3.6	6.3
$14,000 to $17,999	18.0	22.3	14.5	6.3	10.3	3.9	-	3.7	13.9
$18,000 to $21,999	23.6	20.3	17.9	13.4	18.6	4.9	4.9	12.2	16.7
$22,000 to $25,999	16.3	14.2	21.1	47.5	16.8	9.5	15.2	20.0	20.1
$26,000 to $29,999	7.3	8.0	23.7	15.0	21.1	15.8	13.4	24.1	17.6
$30,000 to $34,999	6.2	4.9	9.9	2.8	9.8	22.4	19.5	24.2	9.6
$35,000 to $39,999	2.1	4.6	2.4	0.9	2.4	11.8	15.0	4.0	3.9
$40,000 or more	9.5	7.4	1.8	7.5	12.9	30.3	32.4	4.0	8.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	$22067	$21587	$23460	$24312	$25478	$32178	$33078	$26452	$24313
Weighted N	976	4568	10019	1902	1340	2467	232	54	21557

a. Percentages may sum to other than 100.0 due to rounding.

3.6.3 Major Field of Study

Table 3.6.3.a shows the starting earnings distributions of the 1985 spring graduates by USIS major field of study. Table 3.6.3.b shows this same information for current salaries, and Table 3.6.3.c presents the mean current wage or salary for each of the detailed fields of study. In terms of average starting earnings, the several fields of study span a range from $14,978 (fine and applied arts) to $27,600 (health professions and occupations). Those in the lowest category earned on average just over 50 per cent as much as did those in the highest. The corresponding range for current earnings for the USIS major fields of study is somewhat narrower than that for starting earnings, running from a low of $18,065 (again, for fine and applied arts) to a high of $29,533 (again, for health professions and occupations). Those fields which are characterized by above-average salaries are health professions and occupations, engineering and applied sciences, mathematics and physical sciences, education, physical education, recreation and leisure, and commerce and business administration. Graduates in these fields of study in 1982 were also found to have higher than average current salaries.

TABLE 3.6.3.a

1985 Graduates by Level of Starting Wage or Salary and USIS Major Field of Study, Full-time Employed

Level of Starting Wage or Salary	Percentage[a] USIS Major Field of Study									
	Educ. & Rec. & Lei.	Fine & Applied Arts	Humanities	Social Sciences & Rel.	Comm. & Business Administration	Agri. & Biological Sciences	Eng. & Applied Sciences	Health Prof. & Occup.	Math. & Phys. Sciences	Total
Less than $10,000	15.5	25.2	19.6	14.7	4.2	15.8	1.7	1.4	5.1	10.2
$10,000 to $13,999	9.1	26.3	20.6	15.8	7.7	17.5	3.2	0.5	6.0	10.5
$14,000 to $17,999	10.8	22.0	26.1	22.2	27.4	20.4	8.5	2.9	10.5	17.3
$18,000 to $21,999	17.3	18.3	15.9	23.3	20.4	21.4	14.6	3.3	19.0	17.9
$22,000 to $25,999	34.8	5.4	10.3	14.1	14.6	15.3	29.4	25.7	31.3	21.1
$26,000 to $29,999	7.7	0.7	4.4	4.9	8.3	5.9	32.6	46.9	20.8	14.1
$30,000 to $34,999	1.5	0.4	1.4	2.5	8.3	2.1	6.9	8.2	4.9	4.4
$35,000 to $39,999	1.1	0.3	0.8	1.1	3.2	0.4	1.5	2.7	1.1	1.6
$40,000 or more	2.3	1.2	1.1	1.5	6.1	1.2	1.7	8.5	1.2	2.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	$20185	$14978	$16576	$18092	$21999	$17868	$24426	$27600	$22553	$20816
Weighted N	3347	558	1998	5020	3905	1134	2720	1894	2055	22631

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 3.6.3.b

1985 Graduates by Level of Current Wage or Salary and USIS Major Field of Study, Full-time Employed

Level of Current Wage or Salary	Percentage[a] USIS Major Field of Study									
	Educ. & Rec. & Lei.	Fine & Applied Arts	Humanities	Social Sciences & Rel.	Comm. & Business Administration	Agri. & Biological Sciences	Eng. & Applied Sciences	Health Prof. & Occup.	Math. & Phys. Sciences	Total
Less than $10,000	3.5	12.3	10.6	5.2	1.0	8.9	0.7	0.5	1.9	3.8
$10,000 to $13,999	5.0	17.7	12.4	10.4	3.8	11.1	1.1	0.2	3.7	6.3
$14,000 to $17,999	7.9	25.6	25.4	20.6	10.1	18.9	3.9	1.6	6.9	13.9
$18,000 to $21,999	13.6	25.5	17.8	24.6	20.2	22.3	10.4	1.8	11.5	16.7
$22,000 to $25,999	36.2	10.0	13.7	16.5	14.7	18.1	21.4	18.1	23.2	20.1
$26,000 to $29,999	11.8	2.0	7.2	8.3	12.0	10.2	35.2	44.5	30.6	17.6
$30,000 to $34,999	3.6	1.2	5.4	5.6	11.8	5.7	20.1	14.6	14.6	9.6
$35,000 to $39,999	3.2	2.0	3.4	3.2	5.1	2.2	4.0	6.7	3.7	3.9
$40,000 or more	15.2	3.7	4.2	5.6	13.2	2.7	3.3	12.0	3.8	8.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	$25402	$18065	$20141	$21505	$25490	$20648	$27353	$29533	$25951	$24308
Weighted N	3162	528	1911	4710	3770	1084	2588	1789	1997	21539

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 3.6.3.c

1985 Graduates by Mean Current Wage or Salary and USIS Major Field of Study, Full-time Employed

USIS Field of Study	Mean Wage or Salary ($)
EDUCATION AND GENERAL ARTS	25402
General Arts	27082
Elementary/Secondary Teacher Training	25480
Non-Teaching Field	37238
Physical Education	19372
Education N.E.C.	18291
FINE & APPLIED ARTS	18065
Music	19218
Applied Arts	18109
Fine & Applied Arts N.E.C.	17554
HUMANITIES	20141
English Language and/or Literature	18523
French Language and/or Literature	19109
History	21231
Mass Media Studies (including journalism)	19793
Religious & Theological Studies	22709
Humanities N.E.C.	21237
SOCIAL SCIENCES	21505
Economics	22049
Geography	20656
Law & Jurisprudence	19942
Political Science	20787
Psychology	20568
Social Work & Social Welfare	24628
Sociology	22636
Social Sciences N.E.C.	22033
COMMERCE, MANAGEMENT & BUSINESS ADMINISTRATION	25490

TABLE 3.6.3.c (Continued)

USIS Field of Study	Mean Wage or Salary ($)
AGRICULTURE & BIOLOGICAL SCIENCES	20648
Agriculture	19032
Biology	19862
Household Science	18906
Agriculture & Biological Sciences N.E.C.	23817
ENGINEERING & APPLIED SCIENCE	27353
Chemical Engineering	28231
Civil Engineering	26566
Electrical Engineering	28179
Mechanical Engineering	28660
Other Engineering	28084
Engineering & Applied Sciences N.E.C.	21227
HEALTH PROFESSIONS	29533
Dental Studies & Research	37804
Medical Studies & Research	27688
Nursing	27853
Pharmacy	34254
Rehabilitation Medicine	28703
Health Professions N.E.C.	32065
MATHEMATICS & PHYSICAL SCIENCES	25951
Computer Science	27380
Mathematics	25147
Chemistry	24282
Geology & Related	23316
Physics	26198
Mathematics & Physical Sciences N.E.C.	26125
TOTAL	$24308

a. Percentages may sum to other than 100.0 due to rounding.

Increases from starting to current salary vary considerably across fields of study. Graduates in humanities, social sciences, education, physical education, recreation and leisure, and fine and applied arts all registered above-average increases in this regard, while those in the health professions and occupations showed below-average increases. The largest gains from starting to current salaries were registered by graduates in education, physical education, recreation and leisure (26 per cent) followed by those in humanities and fine and applied arts (approximately 20 per cent). The smallest were shown by graduates of health professions and occupations (7 per cent).

While the mean wage or salary for graduates varies by major field of study, it also differs across detailed fields within each of the major ones. For example, within social sciences, the mean earnings for social work and social welfare graduates was $24,628 while the mean for law and jurisprudence graduates was $19,942. Also, among mathematics and physical science graduates, graduates in computer science earned, on the average, $27,380, while the comparable figure for geology graduates was $23,316.

3.6.4 Language First Learned to Speak

As shown previously, graduates whose first language was English, French or a language other than English or French differed in their fields of study, as well as in their occupational and industrial distributions. Although there were

no real differences between them in their average starting wages or salaries, Table 3.6.4.b shows that 1985 graduates who learned French as their first language earned $1000 more on the average than did graduates as a whole in their current job.

TABLE 3.6.4.a

1985 Graduates by Level of Starting Wage or Salary and Employment Status and Language First Learned to Speak

Level of Starting Wage or Salary	Percentage[a] Language First Learned to Speak			
	English	French	Other	Total
Less than $10,000	10.3	12.8	8.7	10.2
$10,000 to $13,999	10.6	10.0	10.4	10.5
$14,000 to $17,999	16.9	14.9	20.7	17.3
$18,000 to $21,999	18.0	19.5	16.2	17.8
$22,000 to $25,999	21.1	22.4	20.6	21.1
$26,000 to $29,999	14.3	11.7	13.7	14.1
$30,000 to $34,999	4.5	4.0	4.2	4.4
$35,000 to $39,999	1.5	1.5	2.1	1.6
$40,000 or more	2.8	3.2	3.3	2.9
Total	100.0	100.0	100.0	100.0
Mean	$20822	$20490	$20965	$20823
Weighted N	17953	1329	3269	22551

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 3.6.4.b

1985 Graduates by Level of Current Wage or Salary and Employment Status and Language First Learned to Speak

Level of Current Wage or Salary	Percentage[a] Language First Learned to Speak			
	English	French	Other	Total
Less than $10,000	4.1	3.6	2.4	3.8
$10,000 to $13,999	6.3	4.5	6.5	6.3
$14,000 to $17,999	14.0	12.3	14.3	14.0
$18,000 to $21,999	16.8	14.6	16.8	16.7
$22,000 to $25,999	19.8	20.6	20.8	20.0
$26,000 to $29,999	17.8	17.1	17.0	17.7
$30,000 to $34,999	9.5	11.1	9.6	9.6
$35,000 to $39,999	3.8	4.7	4.1	3.9
$40,000 or more	7.8	11.5	8.3	8.1
Total	100.0	100.0	100.0	100.0
Mean	$24193	$25429	$24501	$24312
Weighted N	17070	1298	3122	21491

a. Percentages may sum to other than 100.0 due to rounding.

3.6.5 Employment Status

This section compares the full- and the part-time employed in terms of their starting and current earnings levels. Table 3.6.5.a shows the starting earnings distributions for the full- and the part-time employed, as well as the self-employed; Table 3.6.5.b presents this same information for current earnings. As

these data indicate, the full-time employed earned on the average between about 64 and 87 per cent more than the part-time employed did.[8] Proportionately more of those graduates reporting themselves as self-employed also reported a starting and current salary of over $40,000.

Full-time employed respondents registered the larger starting current salary gains (19 per cent) versus 4 per cent for the part-time employed. These findings parallel those found for the 1982 graduates.

TABLE 3.6.5.a

1985 Graduates by Level of Starting Wage or Salary and Employment Status

Level of Starting Wage or Salary	Percentage[a] Employment Status			
	Full-time	Part-time	Self-Employed	Total
Less than $10,000	12.0	63.0	31.6	17.9
$10,000 to $13,999	11.5	17.5	11.0	12.1
$14,000 to $17,999	17.4	7.8	9.3	16.2
$18,000 to $21,999	17.7	5.9	10.7	16.3
$22,000 to $25,999	20.5	2.8	9.7	18.3
$26,000 to $29,999	13.2	2.0	3.7	11.8
$30,000 to $34,999	4.1	0.8	5.0	3.8
$35,000 to $39,999	1.4	0.1	1.6	1.3
$40,000 or more	2.2	0.2	17.4	2.4
Total	100.0	100.0	100.0	100.0
Mean	$20239	$12360	$20697	$19115
Weighted N	24824	3036	753	28613

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 3.6.5.b

1985 Graduates by Level of Current Wage or Salary and Employment Status

Level of Current Wage or Salary	Percentage[a] Employment Status			
	Full-time	Part-time	Self-Employed	Total
Less than $10,000	4.4	58.4	22.8	10.2
$10,000 to $13,999	6.4	17.6	11.6	7.6
$14,000 to $17,999	14.1	10.4	9.5	13.6
$18,000 to $21,999	16.8	6.8	7.9	15.6
$22,000 to $25,999	20.2	3.3	8.3	18.2
$26,000 to $29,999	17.6	1.6	5.4	15.7
$30,000 to $34,999	9.4	1.2	7.5	8.6
$35,000 to $39,999	3.8	0.5	3.9	3.5
$40,000 or more	7.3	0.3	23.1	7.1
Total	100.0	100.0	100.0	100.0
Mean	$24035	$12840	$23429	$22937
Weighted N	21436	2366	708	24510

a. Percentages may sum to other than 100.0 due to rounding.

3.6.6 Traditional Students

In the analyses of the data on salaries, as well as in those on certain other variables, a subsample of what was defined as "traditional students" was identified for separate inspection. This subgroup included only those 1985 graduates (excluding holders of master's and doctoral degrees) who were born after 1958, took their first post-degree employment after 1983, and were never part-time or extension students. Since the results for this sub-sample did not differ significantly from those found for all students, they are not reported here. For example, the starting salary for full-time employed traditional students in education, physical education, recreation and leisure was $21,432. The corresponding figure for all of the full-time employed in that field was $21,586.

3.7 Overall Job Satisfaction

Overall job satisfaction can be examined across categories of gender, levels of degree or diploma, major fields of study, and full- versus part-time employment.

3.7.1 Gender

The distribution of the full-time employed male and female graduates across a set of categories of overall job satisfaction is shown in Table 3.7.1. While men expressed more satisfaction overall with their jobs than women did, the difference between the sexes in this regard is quite small. The findings in the

1982 survey also showed only minor gender differences in job satisfaction in favour of men.

TABLE 3.7.1

1985 Graduates' Job Satisfaction and Gender, Full-time Employed

Job Satisfaction	Percentage[a]		
	Gender		
	Males	Females	Total
Very satisfied	39.7	39.0	39.3
Quite satisfied	41.2	38.8	39.9
Not very satisfied	13.5	15.7	14.6
Not at all satisfied	5.6	6.6	6.1
Total	100.0	100.0	100.0
Weighted N	10963	11782	22745

a. Percentages may sum to other than 100.0 due to rounding.

3.7.2 Level of Degree or Diploma

Across degree levels, job satisfaction does appear to show some variation, as the data in Table 3.7.2 indicate. In particular, holders of diplomas and three- and four-year bachelor's degrees are less satisfied with their jobs overall than are the other graduates; holders of one-year B.Ed., first professional, master's, and doctoral degrees are all above average in overall job satisfaction.

TABLE 3.7.2

1985 Graduates' Satisfaction With Current Position and Level of Degree or Diploma, Full-time Employed

	Percentage[a]								
	Level of Degree or Diploma								
Job Satisfaction	Diploma	3-year Bachelor's	4-year Bachelor's	1-year B.Ed.	First Professional	Master's	Ph.D.	Other	Total
Very satisfied	35.7	28.8	36.7	57.2	60.9	43.2	52.4	36.9	39.3
Quite satisified	42.8	39.9	41.9	31.3	34.8	40.7	39.1	39.5	39.9
Not very satisfied	14.3	21.1	15.1	8.3	4.4	12.5	6.9	11.8	14.7
Not at all satisfied	7.3	10.1	6.3	3.1	0.7	3.6	1.6	11.7	6.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1028	4816	10539	2033	1490	2576	230	54	22768

a. Percentages may sum to other than 100.0 due to rounding.

Comparisons of the findings for the 1982 and 1985 graduates indicate some changes in the level of job satisfaction of graduates at different diploma or degree levels. Graduates in 1985 with diplomas, first professional degrees or Ph.D.'s appeared more satisfied with their jobs and those with 3-year bachelor degrees less satisfied with their jobs than were their 1982 counterparts.

3.7.3 Major Field of Study

Table 3.7.3 indicates that those in the health professions and occupations and education, physical education, recreation and leisure report higher than average levels of overall job satisfaction, while persons in the humanities, fine and applied arts, agriculture and biological sciences and the social sciences report lower than average levels. In addition, graduates in mathematics and physical sciences show slightly higher than average levels of job satisfaction, while those in commerce and business administration, and engineering and applied sciences show slightly lower than average levels.

TABLE 3.7.3

1985 Graduates' Satisfaction With Current Position by USIS Major Field of Study, Full-time Employed

Job Satisfaction	Percentage[a] USIS Major Field of Study									
	Educ. & Rec. & Lei.	Fine & Applied Arts	Humanities	Social Sciences & Rel.	Comm. & Business Administration	Agri. & Biological Sciences	Eng. & Applied Sciences	Health Prof. & Occup.	Math. & Phys. Sciences	Total
Very satisfied	52.5	31.6	29.7	32.5	36.3	28.9	37.5	60.0	41.3	39.3
Quite satisified	33.7	39.8	39.6	40.5	42.5	42.1	44.5	33.9	41.7	39.9
Not very satisfied	10.4	17.3	20.6	17.3	15.6	19.7	15.1	5.6	11.9	14.7
Not at all satisfied	3.5	11.3	10.1	9.8	5.6	9.2	2.9	0.5	5.1	6.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	3346	566	2006	5063	3973	1129	2723	1878	2066	22749

a. Percentages may sum to other than 100.0 due to rounding.

When the 1982 and 1985 graduates are compared, the data show a number of changes in the level of job satisfaction for graduates in certain fields of study. Specifically, the 1985 graduates in humanities, social sciences, commerce and business administration, agriculture and biological sciences and mathematics and physical sciences appeared less satisfied with their current occupations than did their 1982 counterparts. 1985 graduates in health professions and occupations appeared more satisfied with their job than the 1982 graduates did.

3.7.4 Employment Status

Table 3.7.4 permits a comparison between the full- and the part-time employed in terms of levels of overall job satisfaction. As these data show, the full-time employed are on average more satisfied than the part-time employed, and the self-employed are on the average the most satisfied of all. As compared to the 1982 graduates, the full-time employed 1985 graduates were more satisfied on the average, while the part-time were less satisfied.

TABLE 3.7.4

1985 Graduates' Satisfaction With Current Position by Employment Status

Job Satisfaction	Percentage[a]			
	Employment Status			
	Full-time	Part-time	Self-Employed	Total
Very satisfied	38.4	15.9	42.2	36.3
Quite satisfied	39.9	31.8	36.7	39.0
Not very satisfied	15.2	30.4	15.7	16.7
Not at all satisfied	6.4	22.0	5.3	7.9
Total	100.0	100.0	100.0	100.0
Weighted N	22612	2546	776	25934

a. Percentages may sum to other than 100.0 due to rounding.

3.7.5 Language First Learned to Speak

Table 3.7.5 indicates that 1985 graduates whose first language was French were somewhat more satisfied with their jobs than were graduates as a whole, while those whose first language was other than English or French were less satisfied with their jobs than were graduates as a whole.

TABLE 3.7.5

1985 Graduates' Satisfaction With Current Position by Language First Learned to Speak

Job Satisfaction	Percentage[a]			
	Language First Learned to Speak			
	English	French	Other	Total
Very satisfied	40.1	43.0	33.8	39.3
Quite satisfied	39.5	39.5	42.3	39.9
Not very satisfied	14.3	11.1	17.9	14.6
Not at all satisfied	6.1	6.4	6.0	6.1
Total	100.0	100.0	100.0	100.0
Weighted N	18044	1364	3293	22701

a. Percentages may sum to other than 100.0 due to rounding.

3.8 Satisfaction With Selected Aspects of Jobs

Not only can employed graduates be compared with one another in terms of overall job satisfaction, they can also be compared in terms of satisfaction with specific aspects of their jobs. In the 1985 Ontario Graduate Employment Survey, information was solicited on satisfaction with salary, opportunity for advancement, opportunity for personal initiative, and opportunity for experience and learning skills.

3.8.1 Gender

In general, the finding that men tend to be slightly more satisfied overall with their jobs than women is reproduced in the

separate findings concerning satisfaction with selected aspects of jobs. That is, men reported higher levels of satisfaction than women with regard to salary and opportunity for advancement. For example, proportionately more men than women reported being either very or quite satisfied with opportunity for advancement (72.0 versus 66.1 per cent).

Comparing the findings of the surveys of 1982 and 1985, graduates indicate a change in the relationship of gender to job satisfaction with opportunities for personal initiative and for opportunities for experience and learning skills. While there were no differences by gender on these two selected aspects of job satisfaction for the 1985 graduates, there was a gender difference for the 1982 graduates. That is, the 1982 male graduates reported higher levels of satisfaction than female graduates with regard to opportunity for personal initiative and opportunity for experience and learning skills.

TABLE 3.8.1

1985 Graduates Very or Quite Satisfied With Selected Aspects of Jobs by Gender, Full-time Employed

Job Aspect	Percentage Very or Quite Satisfied			
	Males	Females	Total	Weighted N for Total[a]
Salary	71.1	67.6	69.3	22975
Opportunity for advancement	72.0	66.1	69.0	22648
Opportunity for personal initiative	81.0	80.2	80.6	22863
Opportunity for experience and learning skills	87.2	87.1	87.1	22888

a. Variance in weighted N is due to non-response.

3.8.2 Level of Degree or Diploma

Table 3.8.2 shows the percentages of the 1982 graduates at different degree or diploma levels who reported being either very or quite satisfied with selected aspects of their jobs. Again, these findings are very similar to those for overall job satisfaction, although there are a few deviations which require comment. Those degree or diploma levels which were characterized by fairly high levels of overall job satisfaction are generally the same ones which display high levels of satisfaction with salary, opportunity for advancement, opportunity for personal initiative, and opportunity for experience and learning skills. However, there are exceptions to this. Those who hold master's

and doctoral degrees are less happy with their opportunity for advancement than one might expect.

Comparisons between the findings for 1982 and 1985 graduates indicate changes in the distribution of graduates in the satisfaction with selected aspects of their jobs across degree levels. In particular, 1985 diploma holders were more satisfied with all aspects of their current jobs than their 1982 counterparts. Compared to 1982 graduates, 1985 graduates with first professional degrees were more satisfied with their salary and opportunity for advancement, while graduates with a doctoral degree were less satisfied with these aspects of their job.

TABLE 3.8.2

1985 Graduates Very or Quite Satisfied With Selected Aspects of Jobs by Level of Degree or Diploma, Full-time Employed

Job Aspect	Percentage[a] Level of Degree or Diploma									
	Diploma	3-year Bachelor's	4-year Bachelor's	1-year B.Ed.	First Professional	Master's	Ph.D.	Other	Total	Weighted[a] N for Total
Salary	67.2	62.1	66.7	83.0	75.6	78.7	75.9	68.7	69.3	22998
Opportunity for advancement	68.2	63.3	68.7	76.7	81.0	68.9	64.6	56.9	68.9	22669
Opportunity for personal initiative	77.1	74.6	80.1	88.6	89.3	82.5	91.3	80.9	80.6	22886
Opportunity for experience and learning skills	87.2	81.7	87.1	93.9	95.7	86.9	90.7	72.4	87.1	22910

a. Variance in weighted N is due to non-response.

3.8.3 Major Field of Study

Table 3.8.3 shows the percentages of persons in each major field of study who reported being either very or quite satisfied with selected aspects of their jobs. The results at this level largely reinforce what was found for overall job satisfaction; that is, those fields which display relatively high levels of overall job satisfaction tend also to show elevated levels of satisfaction with regard to the selected aspects of jobs. One exception to this, however, is the category of persons whose major field is agricultural and biological sciences; these graduates indicate a low level of satisfaction with opportunity for advancement relative to their level of job satisfaction and their levels of satisfaction with other aspects of their jobs.

Comparisons between the findings for the 1982 and 1985 graduates indicate a few changes in the distribution of graduates in their satisfaction with selected aspects of their job across fields of study. Specifically, 1985 fine and applied arts graduates were relatively more satisfied with all aspects of their current jobs than their 1982 counterparts. Also, compared to the 1982 graduates in commerce and business administration, agriculture and biological sciences and mathematics and physical sciences, 1985 graduates in these fields were less satisfied with their current salaries.

TABLE 3.8.3

1985 Graduates Very or Quite Satisfied With Selected Aspects of Jobs by USIS Major Field of Study, Full-time Employed

	Percentage[a]										
	USIS Major Field of Study										
Job Aspect	Educ. & Rec. & Lei.	Fine & Applied Arts	Humanities	Social Sciences & Rel.	Comm. & Business Administration	Agri. & Biological Sciences	Eng. & Applied Sciences	Health Prof. & Occup.	Math. & Phys. Sciences	Total	Weighted N for Total[a]
Salary	80.8	57.3	59.2	62.3	63.5	60.8	75.3	86.2	72.3	69.3	22980
Opportunity for advancement	73.0	62.3	61.4	62.0	74.8	55.4	71.7	75.7	74.6	68.9	22651
Opportunity for personal initiative	86.6	73.9	74.7	76.5	81.0	76.0	80.6	88.9	82.2	80.5	22868
Opportunity for experience and learning skills	91.7	84.4	81.8	84.3	87.0	83.7	87.1	95.1	87.0	87.1	22891

a. Variance in weighted N is due to non-response.

3.8.4 Language First Learned to Speak

Graduates who learned to speak a language other than English as a first language differ in their satisfaction with selected aspects of their job from those who first learned to speak English. French-speaking graduates were more satisfied with their salary and opportunity for experience and learning skills than English-speaking graduates were. And, graduates who first learned a language other than English or French were less satisfied with their salary, opportunities for advancement and/or for personal initiative.

TABLE 3.8.4

1985 Graduates Very or Quite Satisfied with Selected Aspects of Jobs by Language First Learned to Speak

Job Aspect	Percentage Language First Learned to Speak				
	English	French	Other	Total	Weighted N for Total[a]
Salary	69.5	74.4	65.8	69.3	22927
Opportunity for advancement	69.3	70.8	66.6	69.0	22602
Opportunity for personal initiative	80.8	82.8	78.2	80.6	22819
Opportunity for experience and learning skills	87.0	89.5	86.7	87.1	22843

a. Variance in Weighted N is due to non-response.

3.9 Migration

As we saw in Chapter 2, 91.1 per cent of the class of 1985 who were employed had jobs in Ontario at the time of the survey. This still leaves some room, however, for variations across different sub-groups in patterns of migration.

3.9.1 Gender

Table 3.9.1 shows the distributions of the full-time employed male and female graduates across a set of categories of residence in the spring of 1983. As one can see in these data, there is a slight tendency for men to be proportionately more mobile than women, although the overwhelming majority of both men and women were located in Ontario. This pattern resembles that found for the 1982 graduates.

TABLE 3.9.1

1985 Graduates by Gender and Location of Current Job, Full-time Employed

Location of Current Job	Percentage[a]		
	Gender		
	Males	Females	Total
Atlantic Provinces	1.3	0.8	1.0
Quebec	2.9	2.0	2.4
Ontario	89.6	92.4	91.1
Manitoba, Saskatchewan	1.1	1.0	1.1
Alberta	2.3	1.6	1.9
British Columbia, Yukon, Northwest Territories	1.5	1.0	1.3
Other	1.4	1.1	1.2
Total	100.0	100.0	100.0
Weighted N	10975	11943	22918

a. Percentages may sum to other than 100.0 due to rounding.

3.9.2 Level of Degree or Diploma

Is there, then, much variation in patterns of migration across levels of degree or diploma? The data in Table 3.9.2 indicate full-time employed holders of doctoral degrees were less likely than other graduates to be located in Ontario in the year following their graduation (65.5 per cent versus 91.1 per cent for the total). Comparisons between the 1985 and 1982 graduates show that the percentage of doctoral degree holders

employed outside of Ontario has decreased almost fourteen points from 1982 to 1985.

TABLE 3.9.2

1985 Graduates by Level of Degree or Diploma and Location of Current Job, Full-time Employed

	Percentage[a]								
	Level of Degree or Diploma								
Location of Current Job	Diploma	3-year Bachelor's	4-year Bachelor's	1-year B.Ed.	First Professional	Master's	Ph.D.	Other	Total
Atlantic Provinces	1.1	0.6	0.5	0.7	3.3	2.4	3.4	4.5	1.0
Quebec	2.7	2.4	2.1	0.9	3.6	3.5	9.5	-	2.4
Ontario	92.9	93.5	91.9	93.9	85.1	86.2	65.5	91.5	91.1
Manitoba, Saskatchewan	1.0	0.9	0.7	1.5	1.2	2.0	6.3	4.0	1.1
Alberta	1.0	1.0	2.3	0.9	2.7	2.9	4.2	-	1.9
British Columbia, Yukon, Northwest Territories	0.4	0.6	1.2	0.6	3.3	1.9	4.1	-	1.3
Other	1.0	0.9	1.3	1.5	0.9	1.0	7.0	-	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1027	4858	10586	2065	1526	2580	246	54	22941

a. Percentages may sum to other than 100.0 due to rounding.

3.9.3 Language First Learned to Speak

Table 3.9.3 indicates that 1985 graduates who learned French as a first language were relatively more likely to be employed in Quebec than were graduates as a whole. These data also show that those graduates who learned a first language other than French or English were relatively more likely than graduates as a whole to be employed in Ontario.

TABLE 3.9.3

1985 Graduates by Language First Learned to Speak and Location of Current Job, Full-time Employed

Location of Current Job	Percentage[a] Language First Learned to Speak			
	English	French	Other	Total
Atlantic Provinces	1.2	1.3	0.3	1.0
Quebec	1.4	19.3	1.1	2.4
Ontario	91.6	76.0	94.4	91.1
Manitoba, Saskatchewan	1.1	1.4	0.8	1.1
Alberta	2.1	0.8	1.3	1.9
British Columbia, Yukon, Northwest Territories	1.4	0.6	0.9	1.3
Other	1.3	0.7	1.2	1.2
Total	100.0	100.0	100.0	100.0
Weighted N	18169	1374	3303	22846

a. Percentages may sum to other than 100.0 due to rounding.

Summary and Conclusions

It is not possible to reduce as lengthy and detailed an analysis as that presented above to a small number of summary statements. Nevertheless, there are many findings which can be arranged in fairly clear and consistent statements. First, slightly more women than men graduate from university-level institutions in Ontario. Second, gender seems to be connected to level of degree or diploma, major field of study, employment status, occupation, earnings, and job satisfaction.

Specifically:

- Proportionately more women are holders of three-year bachelor's degrees and one-year Bachelor of Education degrees, while proportionately more men are holders of diplomas, four-year bachelor's, first professional, master's, and doctoral degrees.
- Proportionately more women graduated in the fields of education, physical education, recreation and leisure, fine and applied arts, humanities, social sciences, and health professions and occupations and proportionately more men graduated in the fields of commerce and business administration, engineering and applied sciences, and mathematics and physical sciences.
- The unemployment rate among 1985 graduates in the spring of 1986 was about the same for women (7.7 per cent) as for men (7.1 per cent).
- The data reveal a pattern in which men tend to be employed in certain occupations and women in others.
- Male graduates have both higher starting and higher current full-time salaries than female graduates.

Third, level of degree or diploma and major field of study are related to employment status, occupation, income, and job satisfaction.

Specifically:

- Graduates with first professional, master's, and doctoral degrees have proportionately higher rates of labour force participation than do holders of three- or four-year bachelor's degrees or diplomas. Graduates with diplomas, four-year bachelor's degrees, first professional degrees and master's degrees have lower unemployment rates than holders of three-year bachelor's degrees, bachelor of education degrees or doctoral degrees.

- Current average salary varies across level of degree or diploma such that the higher the level of degree or diploma, the higher the earnings.

- Holders of diplomas and three-year bachelor's degrees are less satisfied with their jobs overall than the other graduates, while holders of one-year Bachelor of Education, first professional, master's, and doctoral degrees are all above average in overall job satisfaction.

- Graduates in health professions and occupations and commerce and business administration have higher rates of labour force participation and lower rates of unemployment than do graduates in other fields of study.

- Current average full-time salary varies across fields of study. Those fields which are characterized by above-average salaries are: health professions and occupations, engineering and applied sciences, mathematics and physical sciences, education, physical education, recreation and leisure, and commerce and business administration.

- Job satisfaction varies across major fields of study, with those in the health professions and occupations and education, physical education, recreation and leisure reporting higher than average levels of overall job satisfaction.

Fourth, there is some evidence among the population of the university educated to suggest that people's social backgrounds, in terms of their parents' education or main occupation, systematically influence their educational choices or achievements.

Fifth, to the extent that there is migration out of Ontario among graduates, those who move do not seem generally to differ in terms of their educational qualifications from those who do not, although holders of doctoral degrees are somewhat more likely to leave than are other graduates.

Sixth, comparisons between the 1982 and 1985 graduates indicate many similarities in the extent to which educational and early career decisions are related to the facts of demography, origins, and academic choices. There were, however, a number of changes in the three-year period.

Specifically:

- Compared to the 1982 graduates, proportionately more women graduated in 1985 with four-year bachelor's degrees and master's degrees and fewer with Bachelor of Education degrees.
- Proportionately more women graduates in 1985 than in 1982 were holders of degrees in social sciences, and mathematics and physical sciences, and proportionately more males graduated in 1985 with degrees in mathematics and physical sciences.
- In 1983, the unemployment rate for 1982 female graduates was considerably lower than that for male graduates. In 1986 the unemployment rate for 1985 male and female graduates was very similar.
- The labour force participation rate of 1985 three-year bachelor degree holders was comparable to that for four-year bachelor degree holders, whereas the participation rate for the former was much lower than that of the latter for 1982 graduates.
- The unemployment rate one year after graduation for graduates with master's or doctoral degrees was higher for the 1985 graduates than for the 1982 graduates.
- In the 1983 survey of 1982 graduates, those with degrees in engineering and applied sciences had lower rates of labour force participation and higher rates of

unemployment than graduates as a whole, whereas the converse was true for the 1985 graduates.

- Comparisons of the occupations of the 1982 and 1985 graduates indicate changes in the male-female ratio in a number of the common current occupations. The ratio of males to females increased from 1982 to 1985 for computer programmers, and occupations related to management and administration and decreased for accountants, auditors, and other financial officers, lawyers and notaries and social workers.

- 1985 Ph.D. holders were much more likely than 1982 Ph.D. holders to be employed in teaching and related fields and less likely than their 1982 counterparts to be employed in managerial, administrative and related occupations in the social sciences and related fields.

- Relatively more 1985 than 1982 engineering and applied science graduates were employed in manufacturing and business service industries, and relatively fewer in communication and other utility, government, and educational service industries.

- Comparisons between the 1985 and 1982 graduates in satisfaction with the current job showed an overall decrease in job satisfaction. This decrease was more pronounced for holders of 3-year bachelor degrees and graduates in humanities, social sciences, commerce and business administration, agriculture and biological sciences and mathematics and physical sciences.

- 1985 female graduates did not differ from the male graduates on their satisfaction with opportunity for personal initiative and learning skills for their current job. In 1982, the male graduates reported higher levels of satisfaction than female graduates on these two job aspects.

CHAPTER 4 LEVEL OF DEGREE OR DIPLOMA AND MAJOR FIELD OF STUDY AS INTERVENING VARIABLES

Up to this point the analysis has concentrated on overall trends or on relationships between two variables. One of the more prominent findings reported in the previous chapter, for example, was that, relative to male graduates, female graduates had lower salaries, and that both level of degree or diploma and major field of study were related to earnings. However, these findings may be partly explained by introducing some selected intervening or "third" variables into the analysis. For example, the lower salary levels for women might be due to the fact that there are differences between men and women in terms of level of degree or diploma and major field of study.

Looking at the relationships among three variables can also reveal additional differences that a one-way or two-way analysis cannot. For example, although the unemployment rate for male and female graduates as a whole was almost the same in 1985, is this the case when these rates are broken down further by level of degree or field of study? The present chapter explores these issues by introducing some additional variables into the analysis.

4.1 Gender, Unemployment, and Earnings

Table 4.1.a presents the rates of unemployment among the male and female graduates at different degree levels. These figures show that while the overall unemployment rate for women

was nearly equal that for males, there were gender differences in unemployment by degree levels. In particular, female Ph.D. graduates had almost three times the unemployment rate that male Ph.D. graduates reported (15.3 per cent vs. 5.9 per cent).

TABLE 4.1.a

1985 Unemployment Rates by Gender and Level of Degree or Diploma[a]

Level of Degree or Diploma	Percentage Unemployment Rate by Gender		
	Males	Females	Total
Diploma	6.2	7.6	6.8
Bachelor's - 3-year	9.9	8.8	9.3
Bachelor's - 4-year	6.7	7.0	6.9
Bachelor of Education (1-year)	8.1	8.8	8.5
First Professional	3.1	3.1	3.1
Master's	5.3	6.4	5.8
Ph.D.	5.9	15.3	8.6
Other	0.0	10.4	6.7
Total	7.0	7.5	7.3

a. Calculations match the methodology used in the Labour Force Survey.

Table 4.1.b shows the rates of unemployment for male and female graduates across the different major fields of study. In this case, male graduates in agricultural and biological sciences had considerably higher rates of unemployment than female

graduates from the same discipline. And, female graduates in education, physical education, recreation and leisure and engineering and applied sciences had higher rates of unemployment than male graduates. Gender differences in the other fields were only slight.

TABLE 4.1.b

1985 Unemployment Rates by Gender and USIS Major Field of Study[a]

USIS Major Field of Study	Percentage Unemployment Rate by Gender		
	Males	Females	Total
Education, physical education, recreation and leisure	6.8	8.5	8.1
Fine and applied arts	13.1	12.5	12.6
Humanities and related	10.2	10.6	10.5
Social sciences and related	9.3	8.0	8.5
Commerce and business administration	5.4	5.5	5.5
Agricultural and biological sciences	10.1	5.6	7.7
Engineering and applied sciences	5.2	6.8	5.4
Health professions and occupations	1.7	2.0	2.0
Mathematics and physical sciences	6.3	7.2	6.6
Total	7.0	7.6	7.3

a. Calculations match the methodology used in the Labour Force Survey.

Table 4.1.c presents the average earnings of the men and women graduates across levels of degree or diploma. These data indicate that the female earnings disadvantage observed in Chapter 3 occurs across all levels, although it is somewhat larger at lower levels than at higher ones. For example, the male-female annual earnings gap for those with three-year bachelor's degrees was $2884, while that for holders of doctoral degrees is $1105.

TABLE 4.1.c

Mean Current Salary for 1985 Full-time Employed Graduates by Level of Degree or Diploma, by Gender

Level of Degree or Diploma	Mean Salary by Gender		
	Males	Females	Females' Salaries as Percentage of Males'
Diploma	23419	20358	86.9
Bachelor's - 3-year	23316	20432	87.6
Bachelor's - 4-year	25081	21829	87.0
Bachelor of Education - (1 year only)	25732	23685	92.0
First Professional	25866	24909	96.3
Master's	33114	31060	93.8
Ph.D.	33356	32251	96.7
Other	26079	26698	102.4
Total	25961	22796	87.8
Weighted N	10366	11162	21528

Table 4.1.d shows the average earnings of the 1985 spring graduates by gender and major field of study. Here again, the women had lower average earnings than men within every field of study, although their disadvantage did vary somewhat from field to field. Among graduates in engineering and applied sciences and mathematics and physical sciences, women fared quite well relative to men. Among graduates in commerce and business and fine and applied arts, women fared relatively poorly. Neither level of degree or diploma nor major field of study appears to be of particular importance as a factor to explain the relatively lower earnings of female graduates.

TABLE 4.1.d

Mean Current Salary for 1985 Full-time Employed Graduates by USIS Major Field of Study, by Gender

USIS Major Field of Study	Mean Current Salary by Gender		
	Males	Females	Females' Salaries as Percentage of Males'
Education, physical education, recreation and leisure	27371	24509	89.5
Fine and applied arts	20025	17235	86.1
Humanities and related	21982	19250	87.6
Social sciences and related	22798	20709	90.8
Commerce and business administration	27219	23217	85.3
Agricultural and biological sciences	21680	19728	91.0
Engineering and applied sciences	27520	25992	94.4
Health Professions and occupations	31677	28663	90.5
Mathematics and physical sciences	26504	24943	94.1
Total	25960	22784	87.8
Weighted N	10362	11147	21509

Comparing the above results found in 1985 to those observed in 1982 suggests a few changes. First, although the overall gender difference in unemployment rates found in 1982 appears to have disappeared, the gap in unemployment between male and female Ph.D. graduates has widened. And second, female graduates in mathematics and physical sciences have improved their earnings considerably relative to male graduates in the same discipline, narrowing the gap by about seven per cent.

4.2 Level of Degree or Diploma, Major Field of Study, Unemployment, and Earnings

The second section of Chapter 4 more closely examines the association between level of degree or diploma and field of study, on the one hand, and earnings on the other. The associations between level of degree or diploma and earnings might be due to the fact that some major fields of study are better represented at some degree or diploma levels than others (e.g., there is a disproportionate number of engineers with four-year bachelor's degrees). Alternatively, the relationships between major field of study and earnings could arise in the same way, i.e., because some degree or diploma levels are better represented within some fields of study than within others.

Level of degree and major field are considered jointly as determinants of unemployment in Table 4.2.a, where it can be seen that unemployment rates vary across the categories of both level and field; that is, within each degree level, the rates of

unemployment differ across fields of study and, within each field of study, the rates differ across degree levels.

Table 4.2.a shows that, within a number of fields, graduates with a higher degree level tend to have a lower unemployment rate. This does not appear to be the case, however, for those in the social sciences, the agricultural and biological sciences and engineering and applied sciences, where holders with Ph.D's have as high if not higher unemployment rates than B.A. and diploma graduates. As well, graduates with master's degrees in fine arts, humanities, and mathematics and physical sciences have higher unemployment rates than graduates with lower levels of degrees in the same field.

TABLE 4.2.a

1985 Unemployment Rates by USIS Major Field of Study and Level of Degree or Diploma[a]

USIS Major Field of Study	Percentage Unemployment Rate Level of Degree or Diploma								
	Diploma	Bachelor's 3-year	Bachelor's 4-year	B.Ed. 1-year	First Professional	Master's	Ph.D.	Other	Total
Education, physical education, recreation and leisure	8.6	5.5	8.7	8.6	0	4.9	9.1	48.9	8.0
Fine and applied arts	8.9	13.8	14.6	-	-	15.1	0	0	12.5
Humanities and related	10.5	10.5	10.7	-	2.2	11.5	5.9	0	10.4
Social sciences and related	3.6	9.2	8.9	-	4.3	8.0	15.6	24.3	8.5
Commerce and business administration	6.3	9.4	4.8	-	-	3.5	0	0	5.5
Agricultural and biological sciences	2.5	10.7	7.6	-	8.3	7.2	11.1	-	7.9
Engineering and applied sciences	7.1	7.1	5.3	-	-	3.6	7.2	0	5.4
Health professions and occupations	0	2.5	2.2	-	1.6	1.7	0	0	1.9
Mathematics and physical sciences	0	7.8	6.0	-	0	10.0	3.2	-	6.6
Total	6.8	9.2	6.9	8.6	3.2	5.8	8.8	6.7	7.3

a. Calculations match the methodology used in the Labour Force Survey.
b. Revised rate.

Turning to differences within each degree level, graduates in the health professions and occupations generally have lower unemployment rates than other graduates, and those in fine and applied arts have higher rates than the rest. However, there are no other clear patterns. Among diploma holders, for example, those in the social sciences have a relatively low rate of unemployment, while diploma holders in humanities have a relatively high rate. In addition, among the holders of three and four-year bachelor's and Ph.D. degrees, those in the social sciences have rates of unemployment which are above average for the discipline.

The relationship between level of degree or diploma and major field of study and earnings is presented in Table 4.2.b. In Chaper 3, it was found that, on average, those respondents with first professional and other undergraduate degrees and diplomas earned less than those with master's or doctoral degrees. The data here show that, within the major fields of study, the exception to this was those with master's degrees in the agricultural and biological sciences, who earned less than those with first professional degrees in that field. Those respondents in health professions and occupations, engineering and applied sciences, mathematics and physical sciences, education, physical education, recreation and leisure, and commerce and business administration had higher-than-average earnings, while those in the remaining fields earned lower-than-average salaries. Within degree levels, the major exceptions to

this were those respondents with four-year bachelor's degrees in education, physical education, recreation and leisure who earned less than the average for that level, and those with first professional degrees in agricultural and biological sciences who earned more than the average for that level.

TABLE 4.2.b

Mean Current Salary by USIS Major Field of Study and Level of Degree or Diploma, Full-time Employed

USIS Major Field of Study	Mean Current Salary Level of Degree or Diploma Diploma	Bachelor's 3-year	Bachelor's 4-year	B.Ed. 1-year	First Professional	Master's	Ph.D.	Other	Total
Education, physical education, recreation and leisure	26737	23148	20429	24312	17000	36646	37812	11000	25402
Fine and applied arts	17377	21126	17139	-	-	23945	-	25000	18065
Humanities and related	24457	19860	18581	-	20819	24814	29410	19908	20141
Social sciences and related	23892	21507	29147	-	19205	27590	33243	24779	21505
Commerce and business administration	25012	21985	22190	-	-	34060	40000	26381	25495
Agricultural and biological sciences	15955	20344	19408	-	27870	25319	29927	-	20648
Engineering and applied sciences	23056	25735	27309	-	-	32304	35944	26990	27353
Health professions and occupations	27766	28898	28398	-	30670	32942	33433	31006	29533
Mathematics and physical sciences	24313	22971	26280	-	27000	33275	33896	-	25951
Total	22068	21571	23464	24312	25478	32184	33036	26452	24308
Weighted N	976	4556	10014	1902	1340	2465	230	54	21537

With some significant exceptions, the relationships observed between level of degree or diploma, on the one hand, and unemployment and earnings, on the other, are preserved within each of the major fields of study. Likewise, the relationships between major field of study, on the one hand, and unemployment and earnings, on the other, are, for the most part, reproduced within each degree level. As such, there were no notable differences between the 1982 and 1985 graduates in these respects.

Summary and Conclusions

In the present chapter, an attempt was made to examine further the relationships between gender, unemployment rates and salary levels, and to see what differences there might be in these variables between men and women by levels of degree or fields of study. It was found that men earn more than women across all degree levels and fields of study. As for the relationship between gender and unemployment, it was found that women had lower rates of unemployment than men in some fields of study, but female Ph.D. graduates had substantially higher rates of unemployment than males.

In addition, the relationship between level of degree and unemployment and earnings was examined within each major field of study, and the association between major field of study and unemployment and earnings was inspected within each level of degree. The introduction of degree level and major field as

intervening variables did not yield results which were markedly different from those obtained without these variables.

CHAPTER 5 GETTING A JOB

A number of questions in the survey addressed the issue of job search, how useful or successful the various approaches were, and to what extent extra assistance in this area might be useful. The present chapter describes some of the strategies which the 1985 graduates used in their job searches and the results of their efforts, along with something of how these strategies and results related to gender, level of degree or diploma and major field of study.

5.1 Contacts, Interviews, and Offers

Table 5.1.a shows that most of the respondents made contact with many potential employers in searching for jobs following completion of their studies. In fact, 50 per cent made contact with eleven or more potential employers and 13.3 per cent with fifty or more. In turn, these contacts typically generated several job interviews. As the information in Table 5.1.b indicates, about 24.7 per cent of the graduates were interviewed six times or more. Finally, these interviews usually led to at least one job offer, with 43.9 per cent of the graduates receiving two offers or more (Table 5.1.c). These findings were almost the same as the 1982 survey results.

TABLE 5.1.a

1985 Graduates by Number of Initial Contacts with Different Potential Employers,

Number of Contacts	Percentage[a]
0-1	11.4
2-5	23.0
6-10	15.5
11-20	16.0
21-30	10.0
31-50	10.7
More than 50	13.3
Total	100.0
Weighted N	25,751

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 5.1.b

1985 Graduates by Number of Job Interviews Resulting from Initial Contacts with Different Potential Employers

Number of Interviews	Percentage[a]
0-1	26.2
2-3	31.1
4-5	18.0
6-10	16.7
More than 10	8.0
Total	100.0
Weighted N	25,747

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 5.1.c

1985 Graduates by Number of Job Offers

Number of Offers	Percentage[a]
Ø	6.7
1	49.3
2	24.4
3	10.3
4-5	6.5
More than 5	2.7
Total	100.0
Weighted N	26,100

a. Percentages may sum to other than 100.0 due to rounding.

5.2 Job Search Strategies: Total Respondents

It was not uncommon for graduates to use more than one strategy in searching for a job; however, some strategies were more popular than others. As Table 5.2.a shows, the most common strategies were using newspapers or other mass media for job leads, followed by letters or telephone calls to prospective employers, using on-campus placement or career-counselling services, and seeking assistance from friends or relatives. Also fairly common were walk-in contacts with prospective employers, using off-campus Canada Employment Centres, and seeking assistance from former employers. By contrast, faculty members, private employment agencies, and co-operative or internship employers were much less frequently used in job searches. Concerning co-operative or internship employers, however, it should be pointed out that less than 11.3 per cent of the graduates came from programs which involved work experience, so that this was an option not available to most.

There were a few differences between these results and those reported for the 1982 graduates. A larger proportion of the 1985 than of the 1982 graduates, for example, reported using the mass media, friends or relatives and writing or telephoning employers. Also, the use of former employers, has gone down by almost five per cent.

How successful were each of the job search strategies in actually generating job offers for those who used them? Table

5.2.b shows the percentages of the users of each job search strategy who received offers by that means. As these data indicate, there were variations in the apparent success of the several strategies. By this criterion, the most successful was using co-operative or internship employers, followed by using friends or relatives or other former employers. The least successful was using off-campus Canada Employment Centres, followed by using private employment agencies. Here again, there were some differences between the 1985 and 1982 results. Graduates in 1985 reported a relatively higher incidence of job offers received when they used private employment agencies, the mass media, friends or relatives, or writing or telephoning employers, than did the 1982 graduates. There were no differences, however, for the remaining job strategies.

TABLE 5.2.a

Percentages of the 1985 Graduates
Pursuing Selected Job Search Strategies

Job Search Strategy	Percentage[a]
Private employment agency	17.9
Off-campus Canada Employment Centre	33.0
On-campus placement or career-counselling service	55.9
Newspaper, journal, or other media advertisements	63.7
Friends or relatives	52.2
Write or telephone employers	58.3
Walk-in contacts with employers	31.0
Professors, academics	21.5
Former employers	25.8
Co-operative or internship employers[b]	9.5

a. Percentages do not sum to 100.0 because often more than one strategy was pursued.

b. A limited number of programs are co-operative; therefore, the bulk of graduates do not have the opportunity to use this strategy.

TABLE 5.2.b

Percentages of 1985 Graduates Using Selected Job Search Strategies Who Received Job Offers by that Means

Job Search Strategy	Percentage of Successful Users[a]
Private employment agency	33.0
Off-campus Canada Employment Centre	24.3
On-campus placement or career-counselling service	44.1
Newspaper, journal, or other media advertisements	40.0
Friends or relatives	54.1
Write or telephone employers	49.5
Walk-in contacts with employers	51.7
Professors, academics	48.2
Former employers	53.4
Co-operative or internship employers[b]	61.1

a. Percentages do not sum to 100.0 because often more than one strategy was pursued.

b. A limited number of programs are co-operative; therefore, the bulk of graduates do not have the opportunity to use this strategy.

5.3 Job Search Strategies: Gender

Table 5.3.a shows that, in general, male and female graduates were quite similar in terms of their job search strategies. There were, however, some differences. The most common strategy among men was using on-campus placement or

career-counselling services; women tended to rely more on newspaper, journal, or other media advertisements.

The several job search strategies which are the most successful for men tend to be the same ones which are the most successful for women, as the data in Table 5.3.b show. However, there are some differences. Using co-operative or internship employers was the most successful means for both men and women, followed by using friends or relatives and former employers; using off-campus Canada Employment Centres was the least successful means for both. The men who used on-campus placement or career-counselling services, or co-operative or internship employers were more successful than the women; the women who used private employment agencies, off-campus employment centres, newspapers, journals or other media, who had contacts with prospective employers either by letter or walk-in, and who used professors and former employers, fared better than did the men who used the same strategy.

There were only very slight variations in the male-female differences with regard to job search strategies between the 1982 and 1985 studies; however, there were some changes in the success of these strategies. In 1982, for example, females were more successful than males in using the newspaper and other mass media; in 1985, the converse was true. As well, female graduates in 1985 who used private employment agencies were proportionately more successful than their counterparts in 1982.

TABLE 5.3.a

Percentages of the 1985 Graduates Pursuing Selected Job Search Strategies, by Gender

Job Search Strategy	Percentage[a] Gender		
	Males	Females	Total
Private employment agency	19.8	16.3	17.9
Off-campus Canada Employment Centre	33.9	32.2	33.0
On-campus placement or career-counselling service	64.5	49.0	55.9
Newspaper, journal, or other media advertisements	60.6	66.2	63.7
Friends or relatives	50.2	53.8	52.2
Write or telephone employers	55.7	60.5	58.3
Walk-in contacts with employers	28.7	32.8	31.0
Professors, academics	21.6	21.5	21.5
Former employers	26.3	25.4	25.8
Co-operative or internship employers[b]	9.4	9.6	9.5

a. Percentages do not sum to 100.0 because often more than one strategy was pursued.

b. A limited number of programs are co-operative; therefore, the bulk of graduates do not have the opportunity to use this strategy.

TABLE 5.3.b

Percentages of the 1985 Graduates Pursuing Selected Job Search Strategies Who Received Job Offers by that Means, by Gender

Job Search Strategy	Percentage[a] Gender		
	Males	Females	Total
Private employment agency	22.8	43.0	33.0
Off-campus Canada Employment Centre	19.8	28.1	24.3
On-campus placement or career-counselling service	48.3	39.5	44.0
Newspaper, journal, or other media advertisements	36.9	42.2	40.0
Friends or relatives	52.0	55.7	54.1
Write or telephone employers	45.9	52.3	49.6
Walk-in contacts with employers	47.9	54.4	51.7
Professors, academics	45.9	50.1	48.2
Former employers	50.8	55.5	53.4
Co-operative or internship employers[b]	64.7	58.1	61.1

a. Percentages do not sum to 100.0 because often more than one strategy was pursued.

b. A limited number of programs are co-operative; therefore, the bulk of graduates do not have the opportunity to use this strategy.

5.4 Job Search Strategies: Levels of Degree or Diploma

Table 5.4.a shows the percentages of the graduates at different degree levels who made use of the several job search strategies. These data defy quick and easy summary, although some general statements can be made about them. First, holders of first professional and doctoral degrees tend, less frequently than the other graduates do, to rely on most of the strategies listed, except for using faculty members (holders of doctoral degrees) and co-operative or internship employers (holders of first professional degrees). Second, holders of diplomas and bachelor's degrees (three- or four-year, including one-year Bachelor of Education degrees) tend to use employment or career-counselling agencies more than the other graduates do, although holders of one-year Bachelor of Education degrees are relatively unlikely to use private employment agencies and holders of master's degrees are fairly heavy users of private agencies.

TABLE 5.4.a

Percentages of the 1985 Graduates Pursuing Selected Job Search Strategies by Level of Degree or Diploma

Job Search Strategy	Percentage[a] Level of Degree or Diploma								
	Diploma	Bachelor's 3-year	Bachelor's 4-year	B.Ed. 1-year	First Profes-sional	Master's	Ph.D.	Other	Total
Private employment agency	19.6	23.7	18.1	8.0	4.1	23.0	10.6	23.7	17.9
Off-campus Canada Employment Centres	31.3	44.4	33.2	26.1	7.9	28.7	17.7	27.5	33.0
On-campus placement/ career-counselling services	58.5	50.2	62.9	42.7	39.0	59.5	17.7	42.3	55.9
Newspaper/journal/ media ads	66.2	70.1	61.9	74.3	19.6	74.9	68.2	62.6	63.7
Friends or relatives	58.8	63.0	50.6	50.2	24.4	52.9	33.5	51.8	52.2
Write/telephone employers	53.4	56.1	57.8	73.0	43.9	63.7	41.9	61.5	58.3
Walk-in contact with employers	29.5	34.7	30.4	42.5	13.1	23.8	10.8	32.4	31.0
Professors and/or academics	18.9	12.6	22.4	21.6	22.7	37.8	74.3	42.6	21.5
Former employers	25.2	27.6	27.9	17.3	9.5	32.1	14.6	19.3	25.8
Co-op/internship employers	4.0	4.0	12.1	8.9	12.0	10.6	4.9	9.9	9.5

a. Each percentage is the proportion of all 1985 graduates using this source of assistance.

Table 5.4.b shows the percentages of those at each level who were successful in receiving job offers as a consequence of pursuing the various job search strategies. Again, the data describe a complex pattern.

Relative to the other graduates, holders of diplomas were not conspicuously successful in any of the job search strategies which they tried.

Holders of three-year bachelor's degrees did fairly well in relative terms using private employment agencies and off-campus Canada Employment Centres, but not as well in using on-campus placement or career-counselling services, writing or telephoning prospective employers.

Holders of four-year bachelor's degrees were successful relative to the other graduates only in the use of co-operative or internship employers and did comparatively poorly in using advertisements, friends or relatives, writing or telephoning prospective employers, and making walk-in contacts with employers.

Holders of one-year Bachelor of Education degrees were relatively unsuccessful in generating job offers through employment or career-counselling agencies, friends or relatives, or one-time employers, but were quite successful in using advertisements.

Holders of first professional degrees were generally very successful relative to the other graduates in obtaining job offers by any strategy which they attempted.

Holders of master's degrees were more successful than most in using on-campus placement or career-counselling services, while holders of doctoral degrees were not served well by employment or career-counselling agencies, but did relatively well with most of the other strategies which they pursued.

TABLE 5.4.b

Percentages of the 1985 Graduates Pursuing Selected Job Search Strategies who Received Job Offers by that Means, by Level of Degree or Diploma

Job Search Strategy	Percentage[a] Level of Degree or Diploma								
	Diploma	Bachelor's 3-year	Bachelor's 4-year	B.Ed. 1-year	First Professional	Master's	Ph.D.	Other	Total
Private employment agency	30.7	38.3	31.0	30.9	52.4	27.6	22.2	20.0	33.0
Off-campus Canada Employment Centres	20.6	27.9	23.5	23.1	33.6	16.7	0.0	16.7	24.3
On-campus placement/ career-counselling services	42.5	31.8	47.1	34.0	80.0	47.0	26.7	31.6	44.0
Newspaper/journal media ads	38.3	41.5	38.8	43.1	36.9	38.0	46.2	40.7	40.0
Friends or relatives	54.2	57.2	53.2	49.6	65.2	50.8	61.4	47.8	54.1
Write/telephone employers	42.1	43.2	48.8	59.0	73.3	46.3	41.7	48.1	49.6
Walk-in contact with employers	49.7	50.3	51.7	55.2	64.2	45.3	52.6	42.9	51.7
Professors and/or academics	53.6	42.1	48.1	44.0	66.8	46.5	59.1	31.6	48.2
Former employers	55.0	55.2	53.1	50.6	59.2	49.8	60.0	0.0	53.3
Co-op/internship employers	60.0	56.3	65.4	44.0	71.9	46.2	25.0	50.0	61.1

a. Percentages may not sum to 100.0 because often more than one strategy and more than one job offer were involved.

The 1985 patterns of job search strategies were very similar to those in 1982. One difference perhaps worth noting, however, was a relatively high decrease (over 10 per cent) in Ph.D. graduates reporting the use of walk-in contacts with employers and former employers, and an increase by Ph.D.'s in the use of the mass media and professors. As well, there was a relative increase in the use of campus placement services and the mass media for graduates with a master's degree.

There are also differences between the 1982 and 1985 graduates with respect to how successful the various job search strategies were by degree level. The use of professors or academics, for example, appeared to be a better strategy for 1985 diploma graduates than for those who reported using this strategy in 1982. For three- and four-year bachelor degree holders, writing or telephoning employers was relatively more successful for the 1985 than for the 1982 graduates. The use of private employment agencies by graduates with Bachelor of Education degrees did not result in a job offer as frequently in 1985 as in 1982. Canada Manpower Centres produced much better results for the 1985 Bachelor of Education and first professional degree holders than was the case in 1982. First professional degree holders in 1985 also reported more success in using private employment agencies than did their 1982 counterparts. For graduates with master's degrees in 1985, job offers were not as forthcoming as was the case in 1982 from walk-in contacts, professors or former employers or through co-op programs. And, in the case of 1985 Ph.D. graduates, almost all of the strategies

were less successful than reported by 1982 Ph.D.'s, with the exception of the use of newspapers, the success of which increased by almost 10 per cent.

5.5 Job Search Strategies: Major Fields of Study

The use of each of the various job search strategies by 1985 graduates from different major fields of study is shown in Table 5.5.a. Once again, these data do not yield easily to simple summary description, so only some of the more prominent findings will be identified. They are:

> Graduates in education, physical education, recreation and leisure, fine and applied arts, and the humanities were relatively heavy users of advertisements and walk-in contacts with prospective employers. In addition, those in education, physical education, recreation and leisure were relatively less likely to use private employment agencies and more likely to contact employers in writing or on the telephone, and those in fine and applied arts were relatively likely to use friends or relatives and unlikely to use co-operative or internship employers.

> Graduates in social sciences were not at all distinctive in most of the job search strategies which they pursued, with the exception of using Canada Employment Centres, which they did more frequently than other graduates. Graduates in commerce and business administration were fairly heavy users of on-campus services and quite light users of written or telephone contacts with employers, walk-in contacts with employers, faculty members, and co-operative or internship employers.

> Graduates in agricultural and biological sciences tended relatively frequently to use off-campus Canada Employment Centres, faculty members, and former employers, and quite infrequently to use co-operative or internship employers. Those in engineering and applied sciences were relatively heavy users of private employment agencies and on-campus services and both former employers and co-operative or internship employers, and were less likely to use off-campus

employment or career-counselling agencies, advertisements, and friends or relatives.

Graduates in the health field were less likely to use any of the job search strategies.

Those in mathematics and physical sciences tended disproportionately to use private employment agencies and on-campus services, and co-operative or internship employers, and not to use the mass media or written, telephone, or walk-in contacts with prospective employers.

TABLE 5.5.a

Percentages of the 1985 Graduates Pursuing Selected Job Search Strategies by USIS Major Field of Study

Job Search Strategy	Percentage[a] USIS Major Field of Study									
	Educ. Rec. & Lei.	Fine & Appl. Arts	Humani-ties & Rel.	Social Sci & Rel.	Comm. & Bus. Admin.	Agri. & Bio. Sci.	Eng. & Appl. Sci.	Health Prof. & Occup.	Math. & Phys. Sci.	Total
Private employment agency	8.4	13.3	21.8	17.7	26.6	13.9	25.1	5.2	22.4	17.9
Off-campus Canada Employment Centres	27.6	38.0	40.3	41.0	26.7	44.6	32.3	6.5	35.3	33.0
On-campus placement/ career-counselling services	41.9	43.6	44.7	47.6	79.3	56.4	81.1	25.8	74.8	55.9
Newspaper/journal media ads	72.7	59.1	68.8	66.4	61.3	67.1	61.9	38.3	59.9	63.7
Friends or relatives	53.4	62.7	60.5	59.6	50.3	55.0	46.3	26.7	46.5	52.2
Write/telephone employers	69.2	55.2	55.6	60.4	52.4	59.0	60.5	49.8	50.2	58.3
Walk-in contact with employers	40.6	40.5	35.5	31.4	22.0	31.9	26.7	28.1	24.6	31.0
Professors and/or academics	21.9	26.7	21.0	19.9	15.3	36.6	21.8	22.6	21.7	21.5
Former employers	19.4	25.6	25.3	28.7	26.7	29.1	33.3	13.9	26.2	25.8
Co-op/internship employers	9.6	6.1	6.1	7.5	3.7	6.9	14.5	20.9	14.9	9.5

a. Percentages may not sum to 100.0 because often more than one strategy and more than one job offer were involved.

Table 5.5.b shows the percentages of those graduates within each major field of study whose uses of the various job search strategies led to job offers. Specifically:

Graduates in education, physical education, recreation and leisure, fine and applied arts, the humanities, and the social sciences were generally more successful than most in using private employment agencies and off-campus Canada Employment Centres to generate offers of jobs, and less successful than most in using on-campus services and co-operative or internship employers. In addition, walk-in contacts with prospective employers tended to work quite well for them, although this was not true for those in the social sciences. Graduates in commerce and business administration did well relative to the other graduates only in their use of on-campus services; they did quite poorly relative to the other graduates in their use of most of the other job search strategies.

Graduates in agricultural and biological sciences were relatively successful in their use of friends or relatives, walk-in contacts, and faculty members and were relatively unsuccessful in their use of private employment agencies, off-campus Canada Employment Centres, and co-operative or internship employers.

Those in engineering and applied science were comparatively successful only in their use of on-campus placement or career-counselling services and co-operative or internship employers.

Graduates in the health professions and occupations fared better than graduates in most other fields in their use of every strategy.

Graduates in mathematics and physical sciences did relatively well in their use of on-campus services, faculty members, and co-operative or internship employers, and did relatively poorly in their use of private employment agencies, media advertisements, written, telephone, or walk-in contacts with employers and former employers.

TABLE 5.5.b

Percentages of 1985 Graduates Pursuing Selected Job Search Strategies who Received Job Offers by that Means, by USIS Major Field of Study

Job Search Strategy	Percentage[a] by USIS Major Field of Study: Educ. Rec. & Lei.	Fine & Appl. Arts	Humanities & Rel.	Social Sci & Rel.	Comm. & Bus. Admin.	Agri. & Bio. Sci.	Eng. & Appl. Sci.	Health Prof. & Occup.	Math. & Phys. Sci.	Total
Private employment agency	36.4	34.5	47.5	38.4	32.5	33.3	17.1	40.8	25.1	33.0
Off-campus Canada Employment Centres	24.5	29.1	27.7	27.4	25.5	28.1	12.6	29.3	17.8	24.3
On-campus placement/ career-counselling services	32.6	41.7	27.8	31.9	57.1	41.8	51.9	67.6	50.0	44.1
Newspaper/journal media ads	42.5	37.6	38.6	42.4	40.8	35.7	30.2	59.8	34.4	40.0
Friends or relatives	52.0	61.4	56.3	55.4	53.1	59.2	45.9	66.1	50.0	54.1
Write/telephone employers	56.5	48.9	48.0	47.0	44.4	46.0	41.0	79.1	43.1	49.6
Walk-in contact with employers	53.6	55.7	52.9	48.8	48.3	53.7	42.7	76.1	44.6	51.7
Professors and/or academics	43.1	55.0	52.4	44.4	40.5	54.7	44.9	66.1	50.2	48.3
Former employers	52.2	60.1	58.8	50.7	50.1	60.0	48.7	72.0	53.9	53.3
Co-op/internship employers	43.2	54.0	54.9	55.9	54.8	50.9	67.7	73.2	76.7	60.4

a. Percentages may not sum to 100.0 because often more than one strategy and more than one job offer were involved.

In relation to the results from the 1982 survey, a few changes in the use of job search strategies by major field of study can be noted. The use of written or telephone contacts with employers has increased considerably for graduates in education, recreation and leisure, engineering and applied sciences and the health professions. Last year's graduates in engineering and applied sciences also tended to use the mass media and professors and academics more so than in 1982. There was a relative decrease in the use of former employers and an increase in the area of co-op or internship employers among graduates in agriculture and biological sciences. Finally, 1985 graduates in the field of mathematics and physical sciences were more likely to report using the off-campus Canada Employment Centres and the mass media than were 1982 graduates in the same discipline.

There are also some changes from 1982 with respect to whether or not graduates from different disciplines received job offers using the various job search strategies. For graduates in education, recreation and leisure, co-op or internship employers were not as likely to offer jobs in 1985 as they were in 1982. Those in the humanities were relatively more successful in 1985 in writing or telephoning employers. Private employment agencies seemed to produce more job offers in 1985 than in 1982 for graduates from commerce and business, agriculture and biological sciences, and the health professions. Commerce and business graduates in 1985 were also more successful than those in 1982 in obtaining job offers by writing, telephoning or walking in on

employers and less successful than graduates in 1982 from the co-op programme.

Other differences in job search success between the 1982 and 1985 graduates by field of study included an increase in the success of using on-campus placement by those in agriculture and biological sciences and an increase in job offers by engineering and applied science graduates using the mass media. Finally, graduates in the health field in 1985 received relatively more job offers through off-campus Canada Employment Centres than did graduates from the health disciplines in 1982.

5.6 Further Assistance

The 1985 graduates were asked to indicate the extent to which they could have used further assistance in their job searches with regard to career-counselling, preparing résumés, developing interview skills, using job search techniques, and obtaining actual job leads. Table 5.6 shows the percentages of graduates who indicated in each case that they could have used some further assistance. More than half of the graduates reported a need for more help with obtaining actual job leads, followed closely and, in turn, by using job search techniques, developing interview skills, and career-counselling. In every case, including preparing résumés, substantial numbers of graduates indicated that some further assistance would have been useful. These responses were very similar to those of the 1982 graduates.

TABLE 5.6

1985 Graduates Indicating More Assistance is Required in Several Sources of Assistance in the Job Search

Sources of Assistance	Percentage	Weighted N
Career-counselling	53.0	24671
Preparing résumés	42.7	25045
Developing interview skills	58.5	25163
Using job search techniques	59.0	25129
Obtaining actual job leads	63.6	25320

Summary and Conclusions

The members of the class of 1985 typically employed several different strategies in searching for jobs, ranging from using private employment agencies and answering media advertisements to making walk-in contacts with prospective employers. While all of these strategies were successful for some graduates, some were more effective than others, and some worked better for some kinds of people than others. Overall, assistance from co-operative or internship employers or friends or relatives were the most successful strategies, while assistance from off-campus Canada Employment Centres and private employment agencies were the least successful ones. At the same time, what worked well for men did not always work as well for women, and the converse was also true. Specifically, those men who used on-campus services or co-operative or internship employers as sources of assistance were

more successful than those women who did so, while those women who used private employment agencies or who made walk-in contacts with prospective employers fared much better than men who did so. In addition, graduates at different degree or diploma levels and with different major fields of study also differed in the sources of assistance which they used and in the success which they had with each, although these findings are not easily summarized. Large numbers of the graduates reported that they could have used several kinds of further assistance in their job searches, especially with regard to obtaining actual job leads, developing interview skills, and using job search techniques, but also in career-counselling and preparing résumés. Finally, some differences between the 1985 and 1982 survey results were noted.

CHAPTER 6 EDUCATIONAL QUALIFICATIONS AND JOB REQUIREMENTS

The 1985 Ontario Graduate Employment Survey included a number of questions designed to measure different aspects of the articulation between educational qualifications and job requirements. In the present chapter, five different measures are used in an effort to examine this relationship. The first is based on the graduates' perceptions of how related the general skills required in their major fields of study are to those required by their jobs. The second is similar to the first, except that it involves the relevance of the program content and specific skills associated with the different fields of study to the graduates' jobs. The third assesses the extent to which a specific degree or diploma was required or preferred by employers for the graduates' jobs. The fourth determines whether the graduates' levels of degrees or diplomas matched those preferred or required by employers for their jobs. And, the fifth involves whether the graduates' major fields of study were those preferred or required by their employers.

6.1 Gender

Table 6.1.a shows the percentage distributions of the full-time employed male and female graduates across a set of categories which describe how related the general skills involved in the graduates' major fields of study were to the jobs that they had at the time of the survey. As these data indicate, 87.0 per cent of the graduates had completed programs of study in which the general skills involved were at least somewhat related to their jobs, while 13.0 per cent had come from a program in which the general skills involved were "not very" or "not at all related". Approximately equal proportions of men and women indicated that the general skills involved in their major fields of study were at least somewhat related to their jobs.

Tables 6.1.b through 6.1.e provide additional information on the articulation of educational qualifications and jobs, both for full-time employed graduates as a whole and for men and women separately. While the criterion is in each case different, the result remains essentially the same; that is, educational qualifications were at least to some degree relevant to jobs for between about 75 to 85 per cent of the respondents. The specifics of this are illustrated by Table 6.1.a concerning general skills, Table 6.1.b concerning program content and specific skills of graduates' major fields of study, Table 6.1.c concerning employers' requirements or preferences for specific degrees or diplomas, Table 6.1.d concerning employers' requirements or preferences for certain levels of degrees or

diplomas, and Table 6.1.e concerning employers' requirements or preferences for certain major fields of study. Moreover, there is no evidence that male and female graduates differ in regard to the articulation of their educational qualifications and the requirements of their jobs.

The match between some qualifications and jobs does not appear to be quite as strong in 1985 as it was in 1982. This was found in all cases, except in the educational requirements of the most recent job, where no change between 1982 and 1985 could be seen.

TABLE 6.1.a

1985 Graduates by Gender and Relationship of Job in General Skills to Major Field of Study, Full-time Employed

Relationship of Job in General Skills to Major Field of Study	Percentage[a] Gender Males	Females	Total
Very related	56.3	57.0	56.7
Somewhat related	31.3	29.5	30.3
Not very related	7.6	8.5	8.0
Not at all related	4.9	5.1	5.0
Total	100.0	100.0	100.0
Weighted N	11038	11955	22992

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.1.b

1985 Graduates by Gender and Relationship of Job in Program Content to Major Field of Study, Full-time Employed

Relationship of Job in Program Content to Major Field of Study	Percentage Gender[a] Males	Females	Total
Very related	47.0	48.0	47.6
Somewhat related	29.9	26.6	28.2
Not very related	11.7	11.3	11.5
Not at all related	11.4	14.0	12.8
Total	100.0	100.0	100.0
Weighted N	11053	11966	23019

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.1.c

1985 Graduates by Gender and the Educational Requirements of the Most Recent Job, Full-time Employed

Educational Requirements of Most Recent Job	Percentage[a] Gender Males	Females	Total
A specific degree or diploma was required	56.3	53.6	54.9
Any degree or diploma was required	13.4	12.5	12.9
A degree or diploma was desirable (but not required)	14.7	16.4	15.6
No degree was preferred	10.0	11.0	10.6
Don't know	5.6	6.4	6.0
Total	100.0	100.0	100.0
Weighted N	10943	11898	22841

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.1.d

1985 Graduates by Gender and the Articulation of Level of Degree or Diploma Attained and Required or Preferred by the Employers, Full-time Employed

Articulation of Level of Degree or Diploma	Percentage[a] Gender Males	Females	Total
Does not match	24.0	26.5	25.3
Matches	76.0	73.5	74.7
Total	100.0	100.0	100.0
Weighted N	7442	7745	15187

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.1.e

1985 Graduates by Gender and the Articulation of Major Field of Study Attained and Required or Preferred by the Employer, Full-time Employed

Articulation of Major Field of Study	Percentage[a] Gender Males	Females	Total
Does not match	14.4	16.6	15.5
Matches	85.6	83.4	84.5
Total	100.0	100.0	100.0
Weighted N	8117	8423	16540

a. Percentages may sum to other than 100.0 due to rounding.

6.2 Level of Degree or Diploma

The data in Table 6.2.a shows the connection between the graduates' degree or diploma levels and to what extent they perceived the general skills involved in their major fields of study to be related to their jobs. Across the several levels, holders of one-year Bachelor of Education, first professional, and doctoral degrees stand out in terms of the relatively high percentages who reported that their major fields of study involved general skills relevant to their jobs, while graduates of three-year bachelor's programs stand out in terms of the relatively low percentage who reported this.

Tables 6.2.b through 6.2.e report analyses similar to that in Table 6.2.a, except that the criterion is different in each

case. The result, however, is in most cases much the same. Specifically, regardless of what measure is used to gauge the match between people's educational qualifications and their jobs, graduates with one-year Bachelor of Education and first professional degrees are over-represented among those in which the correspondence appears to be greatest, while graduates from three-year bachelor's programs are under-represented among them. There are additional findings, however, which should be noted. First, holders of diplomas resemble holders of three-year bachelor's degrees in terms of the disproportionate numbers with jobs in which no degree or diploma was either required or preferred. Second, holders of diplomas and graduates with master's degrees are, along with holders of three-year bachelor's degrees, over-represented among those employed in jobs where the required or preferred level of degree or diploma is something other than what they have.

In general, the results in this section closely match the findings from 1982; however, there are a few notable differences. First, there appears to be an increase in the proportions of 1985 Bachelor of Education and Ph.D. graduates reporting that the program content of their jobs is very related to their major field of study. Second, 1985 holders of Ph.D. degrees are far more likely than those in 1982 to say that a specific degree or diploma was required by their current employer. Finally, the percentage of 3-year B.A. graduates who reported that the level of degree attained matched that preferred by their employer has

gone up over the three years, while the converse has happened for holders of 4-year B.A. degrees.

TABLE 6.2.a

1985 Graduates by Level of Degree or Diploma and Relationship of Job in General Skills to Major Field of Study, Full-time Employed

Percentage[a]

Relationship of Job in General Skills to Major Field of Study	Level of Degree or Diploma								
	Diploma	Bachelor's 3-year	Bachelor's 4-year	B.Ed. 1-year	First Profes-sional	Master's	Ph.D.	Other	Total
Very related	51.4	33.7	56.7	74.4	90.8	65.2	84.7	56.7	56.6
Somewhat related	32.4	41.9	31.0	19.0	8.6	28.0	15.3	31.2	30.3
Not very related	8.7	14.4	7.6	4.7	0.4	5.2	-	7.7	8.0
Not at all related	7.5	10.0	4.7	2.0	0.1	1.7	-	4.4	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1038	4895	10612	2068	1521	2592	236	54	23015

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.2.b

1985 Graduates by Level of Degree or Diploma and Relationship of Job in Program Content to Major Field of Study, Full-time Employed

Percentage[a]

Relationship of Job in Program Content to Major Field of Study	Level of Degree or Diploma								
	Diploma	Bachelor's 3-year	Bachelor's 4-year	B.Ed. 1-year	First Profes-sional	Master's	Ph.D.	Other	Total
Very related	45.6	20.6	47.1	73.8	91.4	51.3	78.0	48.8	47.5
Somewhat related	33.7	33.2	29.9	15.4	7.0	33.3	17.6	35.5	28.2
Not very related	9.2	19.2	11.4	5.3	1.1	9.9	2.6	7.4	11.5
Not at all related	11.5	27.0	11.6	5.6	0.5	5.5	1.8	8.3	12.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1036	4898	10624	2072	1526	2599	236	54	23044

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.2.c

1985 Graduates by Level of Degree or Diploma and the Educational Requirements of the Most Recent Job, Full-Time Employed

Percentage[a]

Educational Requirements of Most Recent Job	Level of Degree or Diploma: Diploma	Bachelor's 3-year	Bachelor's 4-year	B.Ed. 1-year	First Professional	Master's	Ph.D.	Other	Total
A specific degree or diploma was required	34.7	23.2	55.8	84.6	98.5	65.8	90.9	48.0	54.9
Any degree or diploma was required	8.5	17.8	15.2	2.8	0.4	12.9	3.7	3.9	12.9
A degree or diploma was desirable but not required	22.7	27.5	14.0	7.0	0.3	14.0	2.9	23.7	15.6
No degree or diploma was preferred or required	22.7	21.5	9.0	4.1	0.2	4.0	0.9	16.5	10.6
Don't know	11.4	9.9	6.1	1.5	0.6	3.4	1.6	7.9	6.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	1020	4842	10546	2062	1532	2576	231	54	22864

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.2.d

1985 Graduates by Level of Degree or Diploma and the Articulation of Level of Degree or Diploma Attained and Required or Preferred by the Employer, Full-time Employed

Percentage[a]

Articulation of Level of Degree or Diploma	Level of Degree or Diploma								
	Diploma	Bachelor's 3-year	Bachelor's 4-year	B.Ed. 1-year	First Professional	Master's	Ph.D.	Other	Total
Does not match	31.0	35.0	26.1	13.1	3.2	38.4	19.4	93.2	25.3
Matches	69.0	65.0	73.9	86.9	96.8	61.6	80.6	6.8	74.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	456	1959	7109	1855	1503	2068	222	32	15205

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.2.e

1985 Graduates by Level of Degree or Diploma and the Articulation of Major Field of Study Attained and Required or Preferred by the Employer, Full-time Employed

Percentage[a]

Articulation of Major Field of Study Attained	Level of Degree or Diploma								
	Diploma	Bachelor's 3-year	Bachelor's 4-year	B.Ed. 1-year	First Professional	Master's	Ph.D.	Other	Total
Does not match	18.7	42.1	12.9	4.8	0.7	15.9	9.6	6.2	15.5
Matches	81.3	57.9	87.1	95.2	99.3	84.1	90.4	93.8	84.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	563	2329	7915	1862	1501	2160	195	34	16558

a. Percentages may sum to other than 100.0 due to rounding.

6.3 Major Field of Study

The percentages of the 1985 graduates in different fields of study across several levels of the perceived relevance of the general skills associated with their fields to their current jobs are shown in Table 6.3.a. In terms of this criterion, graduates in fine and applied arts, the humanities, and the social sciences are under-represented among those who see the general skills involved in their fields as relevant to their jobs, while graduates in health professions and occupations, and recreation and leisure, are over-represented among them.

Tables 6.3.b through 6.3.e present data on the connection between educational qualifications and job requirements for the 1985 graduates in terms of program content and specific skills of major field of study (Table 6.3.b), whether employers required or preferred a specific degree or diploma (Table 6.3.c), whether the graduates' degree or diploma levels matched those required or preferred by their employers (Table 6.3.d), and whether the graduates' major field of study matched those required or preferred by their employers (Table 6.3.e). In each case, graduates in fine and applied arts, the humanities, and the social sciences stand relatively low in terms of relevance, while those in health professions and occupations stand the highest. In addition, graduates in engineering rank comparatively high in terms of the matches between their degree levels and major fields on the one hand, and their employers' requirements or preferences in these respects on the other.

The relationship between major field of study and job qualifications has remained fairly stable since the last survey. For some graduates, however, the match between field of study and job has changed. In particular, the percentage of fine and applied arts graduates who reported that the general skills and program content preferred by their employer were very related to their field of study has risen relative to that for other graduates, while the converse has happened for graduates from agriculture and biological sciences and the social sciences. As well, the match between the level of degree or diploma received and required by the employer has decreased since 1982 for graduates in the fields of education, recreation and leisure, commerce and business administration, and agriculture and biological sciences relative to those in other fields.

TABLE 6.3.a

1985 Graduates by USIS Major Field of Study and Relationship of Job in General Skills to Major Field of Study, Full-time Employed

	Percentage[a]									
	USIS Major Field of Study									
Relationship of Job in General Skills to Major Field of Study	Educ. Rec.& Lei.	Fine & Appl. Arts	Humani-ties & Rel.	Social Sci.& Rel.	Comm. & Bus. Admin.	Agri. & Bio. Sci.	Eng. & Appl. Sci.	Health Prof. & Occup.	Math. & Phys. Sci.	Total
Very related	69.4	42.9	40.9	45.9	56.0	44.7	60.4	87.7	55.9	56.7
Somewhat related	22.8	30.1	33.3	35.9	34.3	33.6	31.2	10.8	33.3	30.3
Not very related	5.4	14.2	16.0	10.0	7.1	11.7	5.7	1.3	6.8	8.0
Not at all related	2.4	12.8	9.8	8.2	2.6	10.0	2.7	0.2	4.0	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	3418	572	2040	5122	4006	1133	2727	1905	2076	22997

a. Percentages may not sum to 100.0 because often more than one strategy and more than one job offer were involved.

TABLE 6.3.b

1985 Graduates by USIS Major Field of Study and Relationship of Job in Program Content to Major Field of Study, Full-time Employed

Percentage[a]

Relationship of Job in General Skills to Major Field of Study	USIS Major Field of Study									
	Educ. Rec.& Lei.	Fine & Appl. Arts	Humani-ties & Rel.	Social Sci.& Rel.	Comm. & Bus. Admin.	Agri. & Bio. Sci.	Eng. & Appl. Sci.	Health Prof. & Occup.	Math. & Phys. Sci.	Total
Very related	67.4	42.0	25.1	31.9	42.2	44.3	45.8	86.6	55.7	47.5
Somewhat related	19.5	27.3	26.6	29.3	39.7	25.5	35.2	10.9	27.7	28.2
Not very related	5.7	7.8	18.4	17.1	11.2	11.8	13.9	1.3	7.9	11.5
Not at all related	7.5	22.9	30.0	21.7	6.9	18.4	5.2	1.3	8.6	12.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	3419	572	2045	5131	4006	1136	2729	1909	2078	23026

a. Percentages may not sum to 100.0 because often more than one strategy and more than one job offer were involved.

TABLE 6.3.c

1985 Graduates by USIS Major Field of Study and the Educational Requirements of the Most Recent Job, Full-time Employed

Educational Requirements of Most Recent Job	Percentage[a] USIS Major Field of Study									
	Educ. Rec. & Lei.	Fine & Appl. Arts	Humani-ties & Rel.	Social Sci. & Rel.	Comm. & Bus. Admin.	Agri. & Bio. Sci.	Eng. & Appl. Sci.	Health Prof. & Occup.	Math. & Phys. Sci.	Total
Specific degree or diploma was required	74.3	23.9	29.2	40.0	41.2	50.7	75.9	95.9	56.1	54.9
Any degree or diploma was required	6.1	6.9	13.5	16.0	23.6	9.8	7.3	1.4	17.5	12.9
A degree or diploma was desirable but not required	11.6	23.7	24.4	20.5	19.6	17.3	8.9	2.3	11.5	15.6
No degree or diploma was preferred or required	5.8	30.8	21.2	16.0	9.2	16.3	3.4	0.4	7.6	10.6
Don't know	2.1	14.8	11.8	7.4	6.3	5.9	4.8	-	7.4	6.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	3398	568	2028	5092	3952	1120	2719	1911	2057	22846

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.3.d

1985 Graduates by USIS Major Field of Study and the Articulation of the Level of Degree or Diploma Attained and Required or Preferred by the Employer, Full-time Employed

Percentage[a]

Articulation of Level of Degree or Diploma	USIS Major Field of Study									
	Educ. Rec. & Lei.	Fine & Appl. Arts	Humani-ties & Rel.	Social Sci. & Rel.	Comm. & Bus. Admin.	Agri. & Bio. Sci.	Eng. & Appl. Sci.	Health Prof. & Occup.	Math. & Phys. Sci.	Total
Does not match	31.3	28.4	39.9	28.1	32.2	26.1	11.0	10.2	28.1	25.3
Matches	68.7	71.6	60.1	71.9	67.7	73.9	89.0	89.8	71.9	74.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	2815	205	879	2742	2403	705	2218	1838	1389	15194

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.3.e

1985 Graduates by USIS Major Field of Study and Articulation of Major Field of Study Attained by Job Requirements Required or Preferred by the Employer, Full-time Employed

Articulation of Major Field of Study	Percentage[a] USIS Major Field of Study									
	Educ. Rec.& Lei.	Fine & Appl. Arts	Humani-ties & Rel.	Social Sci.& Rel.	Comm. & Bus. Admin.	Agri. & Bio. Sci.	Eng. & Appl. Sci.	Health Prof. & Occup.	Math. & Phys. Sci.	Total
Does not match	9.4	26.3	39.1	31.9	12.8	13.9	4.5	2.6	17.4	15.5
Matches	90.6	73.7	60.9	68.1	87.2	86.1	95.5	97.4	82.6	84.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted N	2883	233	959	3024	2852	773	2392	1868	1577	16561

a. Percentages may sum to other than 100.0 due to rounding.

6.4 Full- and Part-time Employed

The final tables in this chapter involve comparisons among those graduates employed full- versus part-time, as well as those who are self-employed, in terms of the relevance of their educational qualifications for the kind of work that they do. Table 6.4.a presents this comparison, using the perceived relevance of the general skills associated with the graduates' major fields of study for their current jobs as the criterion. As these data show, there are differences between the full-time, the part-time, and the self-employed in terms of the apparent relevance of these general skills. The full-time employed, more than the other two groups, are engaged in paid employment in which the general skills involved in their programs of study appear to them as relevant.

Tables 6.4.b through 6.4.e present the distributions of the full-time, part-time and self-employed 1985 graduates across different sets of categories describing the relationship between their educational experiences and their current jobs. As these data indicate, the full-time employed, more than the part-time and self-employed, have educational qualifications that appear to have at least some relevance for their work. The only exceptions to this are for the articulation of major field or level of degree and diploma required and job, where the self-employed report matching levels as high, or even higher, than do the full-time employed.

The 1982 study looked only at differences between full- and part-time employed graduates, and thus is not comparable to the 1985 results.

TABLE 6.4.a

1985 Graduates by Employment Status and Relationship of Job in General Skills to Major Field of Study

Relationship of Job in General Skills to Major Field of Study	Percentage[a] Employment Status			
	Full-Time	Part-Time	Self-Employed	Total
Very related	56.2	40.9	51.9	54.6
Somewhat related	30.3	25.8	32.8	30.0
Not very related	8.2	14.8	7.1	8.8
Not at all related	5.2	18.6	8.3	6.6
Total	100.0	100.0	100.0	100.0
Weighted N	22868	2595	791	26254

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.4.b

1985 Graduates by Employment Status and Relationship of Job in Program Content to Major Field of Study

Relationship of Job in Program Content to Major Field of Study	Percentage[a] Employment Status			
	Full-Time	Part-Time	Self-Employed	Total
Very related	47.4	38.0	43.0	46.3
Somewhat related	28.1	20.1	26.7	27.2
Not very related	11.5	13.7	11.5	11.7
Not at all related	13.1	28.3	18.8	14.8
Total	100.0	100.0	100.0	100.0
Weighted N	22888	2611	795	26294

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.4.c

1985 Graduates by Employment Status and the Educational Requirements of the Most Recent Job

Educational Requirements of Most Recent Job	Percentage[a] Employment Status: Full-Time	Part-Time	Self-Employed	Total
A specific degree or diploma was required	54.7	43.3	39.2	53.2
Any degree or diploma was required	13.1	5.0	1.9	12.0
A degree or diploma was desirable (but not required)	15.6	12.5	12.1	15.2
No degree or diploma was preferred or required	10.5	32.2	36.3	13.3
Don't know	6.1	6.9	10.5	6.3
Total	100.0	100.0	100.0	100.0
Weighted N	22818	2573	640	26031

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.4.d

1985 Graduates and Employment Status and the Articulation of Major Field of Study Attained and Required or Preferred by the Employer

Articulation of Major Field of Study	Percentage[a] Employment Status: Full-Time	Part-Time	Self-Employed	Total
Does not match	15.8	20.7	16.0	16.2
Matches	84.2	79.3	84.0	83.3
Total	100.0	100.0	100.0	100.0
Weighted N	16504	1391	292	18187

a. Percentages may sum to other than 100.0 due to rounding.

TABLE 6.4.e

1985 Graduates and Employment Status and the Articulation of Level of Degree or Diploma Attained and Required or Preferred by the Employer

Articulation of Level of Degree or Diploma	Percentage[a] Employment Status: Full-Time	Part-Time	Self-Employed	Total
Does not match	25.5	35.8	17.5	26.2
Matches	74.5	64.2	82.5	73.8
Total	100.0	100.0	100.0	100.0
Weighted N	15167	1362	269	16799

a. Percentages may sum to other than 100.0 due to rounding.

Summary and Conclusions

While there were very few differences found between the male and female graduates in terms of the articulation of their educational qualifications and the requirements of their jobs, the relationship between educational qualifications and job requirements was closer for graduates at some diploma or degree levels than others and for those in some fields of study than others, as well as for the full-time, part-time and self-employed. Specifically, holders of one-year Bachelor of Education and first professional degrees stood out among those whose qualifications did seem to relate closely to their jobs; holders of three-year bachelor's degrees ranked relatively low in this regard. In addition, graduates in fine and applied arts, the humanities, and the social sciences appeared to be less able than other graduates to translate their educational qualifications into jobs in their fields, while those in health professions and occupations seemed to be especially able to do this, and those in engineering and applied sciences fared quite well in this regard on several measures of job relevance and fared poorly on none.

APPENDIX

A-1 Schedule of Activities

TABLE A-1

	Activities	Date (1986)
1.	Modification of Questionnaire, letters to university officials, organizing mailing procedures, etc.	Feb. 1 to Feb. 28
2.	Finalization of mailing material, ministry approval of format and translation to French, graduate mailing lists received from universities.	March 1 to March 31
3.	Commencement of printing of mailed materials, creation of master address files, printing of mailing labels, preparation of coding manual.	April 1 to April 14
4.	Distribution of questionnaires and related material to universities doing their own mailing, submission of coding manual to ministry for approval.	April 15 to April 30
5.	Completion of first mailing, moritoring returns, training of staff, coding of initial returns, development of data editing program begins.	May 1 to May 14
6.	Monitoring returns, sending out reminder cards, coding continues, compilation of non-deliverable lists for universities.	May 15 to May 31
7.	Meeting with ministry and university representatives to approve initial coding, distribution of non-deliverable lists to universities, coding continues.	June 1 to June 14
8.	Monitoring secondary returns, sending reminders and second questionnaires to traced non-deliverable respondents, coding continues.	June 15 to June 30
9.	Coding continues, data entry begins, preparation of field reports.	July 1 to July 14
10.	Coding continues, data entry continues, finalizing of editing program.	July 15 to July 31

TABLE A-1 (con't)

	Activities	Date (1986)
11.	Coding continues, data entry continues, data editing begins.	Aug. 1 to Aug. 14
12.	Coding continues, data entry continues, data editing continues, development of SPSSX programs begins.	Aug. 15 to Aug. 31
13.	Coding continues, data entry continues, data editing continues, preliminary report on methodology.	Sept. 1 to Sept. 14
14.	Coding continues, data entry continues, data editing continues, telephone interviews of low response universities begins.	Sept. 15 to Sept. 30
15.	Telephone interviews completed, coding completed, data entry completed, data editing continues.	Oct. 1 to Oct. 14
16.	Data editing completed, university data files and combined data file created, SPSSX frequency program completed.	Oct. 15 to Oct. 31
17.	Report outline discussed with ministry; final response tables, final frequencies produced, final draft of methodology, report of findings begun.	Nov. 1 to Nov. 14
18.	Final tabulations completed, report on findings continues.	Nov. 15 to Nov. 30
19.	Drafting of final report begins and submitted to ministry for discussion.	Dec. 1 to Dec. 15

GRADUATE EMPLOYMENT SURVEY

INSTRUCTIONS

Please read the instructions for each question carefully and indicate your response by checking the appropriate box ☑ where applicable. If you find that none of the responses applies to you, please write in your answer near the question. If a write-in response is required, please print to ensure that your answer is legible. Please be careful to follow instructions in the questionnaire and complete only those questions which apply to you. Thank you for your help.

(Ce questionnaire est disponible en francais sur demande)

SECTION A

To be completed by all respondents

1. Please indicate your: 9-11

a. Year of birth ..... 19 ☐☐

b. Gender ..... Male ☐ 1

..... Female ☐ 2

2a. When did you complete the requirements for your most recent degree or diploma prior to June 1985? (PLEASE INDICATE BOTH YEAR AND MONTH) 12-15

Year ..... 19 ☐☐

Month ..... ☐☐

b. And, when did you receive this degree or diploma (i.e. what was your convocation date)? (PLEASE INDICATE BOTH YEAR AND MONTH) 16-19

Year ..... 19 ☐☐

Month ..... ☐☐

3a. What level of degree or diploma did you receive? (CHECK ONE BOX ONLY) 20-21

Bachelor's — 3 yr. ..... ☐ 01

Bachelor's — 4 yr. (including 4 yr. B.Ed.) .. ☐ 02

B.Ed. (1 yr. only) ..... ☐ 03

M.D./D.D.S./L.L.L.B./L.L.L./O.D./ D.V.M./M.DIV. ..... ☐ 04

Master's (excluding M.DIV.) ..... ☐ 05

Ph.D. ..... ☐ 06

Diploma/Certificate ..... ☐ 07

Other (PLEASE SPECIFY) ..... ☐ 08

_____

b. From which institution did you receive this degree or diploma? (PLEASE GIVE FULL NAME OF INSTITUTION — i.e. Univ. of Windsor NOT U. of W.)

_____

_____

4a. Please describe the degree or diploma which you received (e.g. Master of Applied Science, Bachelor of Education, Bachelor of Commerce). (PLEASE BE AS COMPLETE AS POSSIBLE). 22 23

DEGREE/ DIPLOMA _____

b. What was your major field of Study? Please provide as much information as possible (e.g. Civil Engineering rather than just Engineering or Slavic Languages rather than Languages). If more than one major, please describe both. 24-29

FIELD(S) OF STUDY
1. _____
2. _____

5a. Did you graduate from . . . (CHECK ONE BOX ONLY) 30

a regular program? ..... ☐ 1

a co-op program? ..... ☐ 2

a regular program which required work experience and/or internship? ..... ☐ 3

other (PLEASE SPECIFY) ..... ☐ 4

_____

b. During your most recent degree or diploma program, were you enrolled as . . . (PLEASE CHECK ONE BOX ONLY) 31

a full-time student only? ..... ☐ 1

both a full-time and part-time/ extension student? ..... ☐ 2

a part-time/extension student only? ..... ☐ 3

other? (PLEASE SPECIFY) ..... ☐ 4

_____

c. Do you hold any other post-secondary degrees, diplomas or certificates? 32

No ..... ☐ 1

Yes ..... ☐ 2

(PLEASE LIST AND GIVE YEAR OBTAINED) 33-42

_____

_____

_____

6. 43-58 Please record total work experience since completing your secondary school education, or equivalent, for each of the following categories.

a) Summer jobs -- full time (25 hrs. or more per week) ..... Yrs. Mths.

b) Part-time (including summer less than 25 hrs/wk) ..... Yrs. Mths.

c) Full-time (excluding summer) .. Yrs. Mths.

d) Co-op, Field Placement or Internship ..... Yrs. Mths.

7. 59 Are you currently enrolled in a post-secondary education course or program on a full-time or part-time basis?
Please include any post-secondary program or course leading to professional certification.

Yes .... ☐ 1. (CONTINUE WITH SECTION B, QUESTION 8)

No .... ☐ 2. (GO TO SECTION C, QUESTION 13)

SECTION B

To be completed only by those currently enrolled in a full-time or part-time post-secondary education course or program, a post-doctoral program, or a program or course leading to professional certification.

8. 60 61 In which of the following post-secondary courses or programs are you enrolled? (PLEASE CHECK ONE BOX ONLY)

- General interest course (non-credit) ..... ☐ 01
- Polytechnical Program ..... ☐ 02
- Community College/Trade School Program ..... ☐ 03
- Undergraduate (including make-up year) .. ☐ 04
- Professional Certification (i.e. CA) ..... ☐ 05
- Teacher Education ..... ☐ 06
- M.D./D.D.S./L.L.B./L.L.L./O.D./D.V.M./D.DIV. ..... ☐ 07
- Graduate (excluding M.DIV.) ..... ☐ 08
- Post-doctoral ..... ☐ 09
- Other (PLEASE SPECIFY) ..... ☐ 10

_____

9. 62 In which type of program are you currently enrolled?

- Regular program ..... ☐ 1
- Co-op program ..... ☐ 2
- A regular program which requires work experience and/or internship ..... ☐ 3
- Other (PLEASE SPECIFY) ..... ☐ 4

_____

10. 63 Are you currently enrolled as a .... (PLEASE CHECK ONE BOX ONLY)

- Full-time student? ..... ☐ 1
- Part-time/extension student? ..... ☐ 2
- Correspondence student? ..... ☐ 3
- Other (PLEASE SPECIFY) ..... ☐ 4

_____

11a. 64-65 Please describe the degree, diploma, or certificate program in which you are currently enrolled, if applicable (e.g. Bachelor of Education, Master of Science, Ph.D. Diploma in Business Administration).
(PLEASE BE AS COMPLETE AS POSSIBLE)

DEGREE/
DIPLOMA/
CERTIFICATE: _____

b. 66-68 What is your major field of study? Please provide as much information as possible (e.g. High Energy Physics, Molecular Biology, Journalism, Auto Mechanics).

FIELD OF STUDY
OR COURSE: _____

c. 69-70 What is the name of the institution you are currently attending for your further education?

FULL NAME OF
INSTITUTION: _____

_____

12. 71-74 Please indicate the two statements that best describe why you decided to continue your education? (PLEASE INDICATE YOUR 1ST AND 2ND CHOICES BY PLACING THE APPROPRIATE NUMBERS IN THE BOXES BELOW)

1. Further education required for desired employment
2. Wished to study further in a specific field
3. Lack of suitable employment opportunities
4. Encouraged by others to continue studies
5. General interest
6. Other (PLEASE SPECIFY)

_____

1ST CHOICE ☐ 2ND CHOICE ☐

SECTION C

To be completed by all respondents

13a. 75 Are you currently . . . (PLEASE CHECK ONE BOX ONLY)

- employed on a full-time basis . ☐ 1 } CONTINUE WITH QUESTION 13b
- employed on a part-time basis . ☐ 2 } CONTINUE WITH QUESTION 13b
- Not employed but waiting for job to start or awaiting recall .. ☐ 3 } GO TO QUESTION 17
- not employed but looking for a job ..... ☐ 4 } GO TO QUESTION 17
- not employed and not looking for employment ..... ☐ 5 } GO TO QUESTION 14

b. 76 Are you currently employed in a job which you held before or during your education program (other than summer jobs or co-op work terms)?

Yes .... ☐ 1 (GO TO QUESTION 23)
No .... ☐ 2 (GO TO QUESTION 17)

14. 77-78 For what main reason are you not looking for employment? (PLEASE CHECK ONE BOX ONLY)

- Further education ..... ☐ 01
- Travel ..... ☐ 02
- Health ..... ☐ 03
- Home or family responsibilities ..... ☐ 04
- Poor job market ..... ☐ 05
- Other (PLEASE SPECIFY)..... ☐ 06

_____

15. 79 Did you ever look for employment since starting the program from which you received your most recent degree or diploma?

Yes .... ☐ 1 (GO TO QUESTION 17)
No .... ☐ 2 (CONTINUE WITH QUESTION 16)

16. 80 Have you ever been employed since completing the requirements for your most recent degree or diploma?

Yes .. ☐ 1 (GO TO SECTION D, QUESTION 23)
No .. ☐ 2 (GO TO SECTION E, QUESTION 37)

17. When looking for employment, several sources are available for assistance. Some of the sources used most often are listed below. For each of the questions please check the box if the answer is YES. (CHECK AS MANY BOXES AS APPROPRIATE). In 2 9-41

	1. Did you use this approach?	2. If Yes, did you find this approach useful?	3. Did this approach result in at least one job offer?
a) Private Employment Agencies	☐	☐	☐
b) Off-Campus Canada Employment Centre	☐	☐	☐
c) On-Campus Placement/ Career Counselling Services	☐	☐	☐
d) Newspaper/ Journal Media Ads	☐	☐	☐
e) Friends or Relatives	☐	☐	☐
f) Write/Telephone Employer	☐	☐	☐
g) Walk-in Contacts with Employers	☐	☐	☐
h) Professors and/ or Academic Departments	☐	☐	☐
i) Former Employers	☐	☐	☐
j) Co/op Internship Employers	☐	☐	☐
k) Other ..... (i.e. started Private Practice, Self Employed)	☐	☐	☐

(PLEASE SPECIFY)

_____

18. For each of the following, please indicate the extent to which you could have used additional assistance in your job search. (PLEASE CHECK ONE BOX ONLY FOR EACH STATEMENT) 42-46

	Much More Assistance	Some More Assistance	No More Assistance	No Assistance Was Required
a) Career counselling	☐	☐	☐	☐
b) Preparing resumes	☐	☐	☐	☐
c) Developing interview skills	☐	☐	☐	☐
d) Using job search techniques (i.e. where and how to look for job opportunities)	☐	☐	☐	☐
e) Obtaining actual job leads (i.e. company names and addresses)	☐	☐	☐	☐

19. Please indicate when you began to search for your first employment after completing the requirements for your most recent degree or diploma. (If you began your search before completing the requirements, please still record the year and month when you began your search). (PLEASE INDICATE BOTH YEAR AND MONTH) 47-50

Year ..... 19 ☐☐

Month ..... ☐☐

20. Approximately how many initial contacts with different potential employers (either by phone, mail, or in person) did you make from the time you started your job search until you accepted your first job? (If you have not found employment since graduation, please indicate total number of contacts until present time.) 51-53

Number of initial contacts ..... ☐☐☐

21. How many first job interviews did these contacts generate? 54-56

Number of interviews ..... ☐☐☐

22. How many actual job offers did you receive? 57-58

Number of job offers ..... ☐☐

If you have NOT been employed, either full-time or part-time, since completing the requirements for your most recent degree or diploma, please go to Section E, Question 37.

SECTION D

To be completed ONLY by those currently employed, or those who have held at least one job, either full-time or part-time, since completing the requirements for their most recent degree or diploma. IF MORE THAN ONE JOB WAS HELD AT THE SAME TIME, PLEASE COMPLETE FOR THE JOB WHICH OCCUPIED THE MOST TIME PER WEEK.

23. When did you (or will you) start your first job after completing the requirements for your most recent degree or diploma? (If the job was obtained or started before completing the degree or diploma requirements, please still record the year and month the job was first started.) (PLEASE RECORD YEAR AND MONTH). 59-62

Year ..... 19 ☐☐

Month ..... ☐☐

24. In choosing your first full-time job, what are (were) the two most important criteria? **(Please indicate your 1st and 2nd choices by placing the appropriate numbers in the boxes below)** 63-66

01. Opportunity to work in the field of my choice
02. Opportunity to use my special abilities and aptitudes
03. Good salary
04. Opportunity for advancement
05. Stable, secure future
06. Opportunity to be helpful to others
07. Near places of residence
08. Only job I could get
09. To accompany spouse
10. To gain experience and learn skills
11. Other (PLEASE SPECIFY) _____

1ST CHOICE ☐ 2ND CHOICE ☐

25. Please describe the details of your first job since completing the requirements for your most recent degree or diploma according to the specifications outlined below. (IT IS IMPORTANT TO BE AS DETAILED AS POSSIBLE). 67-70

a) JOB TITLE (e.g. Civil Engineer, Editorial Assistant, Systems Analyst, Social Worker)

_____

b) What TYPE OF WORK do, or did you do? What are (or were) your main job duties? (e.g. Preparing Construction Plans, Editing Manuscripts, Designing Computer Systems, Client Counselling and Referral)

_____

_____

71-73 c) What kind of business, industry or service is this organization? (e.g. Building Construction, Magazine Publishing, Computer Software Rental and Sales, Regional Social Services). (IT IS IMPORTANT TO BE AS DETAILED AS POSSIBLE)

_____

_____

d) FULL NAME OF ORGANIZATION? (If self-employed, please indicate)

_____

74 e) Is this a Crown Corporation?

Yes.... ☐ 1

No.... ☐ 2

75-76 f) CITY:

_____

77-78 g) PROVINCE/STATE:

_____

79-80 h) COUNTRY: (If outside Canada)

In 2

_____

9 i) EMPLOYMENT STATUS (with this organization):

Full-time permanent (no specified termination date) ..... ☐ 1

Full-time temporary (contract, interim, summer job, etc.) ..... ☐ 2

Part-time (permanent or temporary) ... ☐ 3

Self Employed ..... ☐ 4

10 j) HOURS WORKED PER WEEK:

Less than 25 hrs/week ..... ☐ 1

25 - 29 hrs./week ..... ☐ 2

30 - 35 hrs./week ..... ☐ 3

36 - 40 hrs./week ..... ☐ 4

More than 40 hrs./week ..... ☐ 5

26. And what was your approximate starting salary? (If self employed, please indicate anticipated yearly income). 11 12
(PLEASE CHECK ONE BOX ONLY)

Less than $10,000 per year ..... ☐ 01

$10,000 to $11,999 per year ..... ☐ 02

$12,000 to $13,999 per year ..... ☐ 03

$14,000 to $15,999 per year ..... ☐ 04

$16,000 to $17,999 per year ..... ☐ 05

$18,000 to $19,999 per year ..... ☐ 06

$20,000 to $21,999 per year ..... ☐ 07

$22,000 to $23,999 per year ..... ☐ 08

$24,000 to $25,999 per year ..... ☐ 09

$26,000 to $27,999 per year ..... ☐ 10

$28,000 to $29,999 per year ..... ☐ 11

$30,000 to $34,999 per year ..... ☐ 12

$35,000 to $39,999 per year ..... ☐ 13

$40,000 or more per year ..... ☐ 14

27a. Did you work full-time or part-time for this employer before beginning, or during your most recent degree or diploma program? 13

Yes, as a regular employee ..... ☐ 1

Yes, as a co-op student ..... ☐ 2

Yes, in a field placement or internship .... ☐ 3

Yes, in a summer job ..... ☐ 4

No ..... ☐ 5

Not applicable, self-employed ..... ☐ 6

b. IF YES, was that job about the same as your first job after completing the requirements for your most recent degree or diploma? 14

Yes... ☐ 1

No.... ☐ 2

28. Have you changed your type of work or job since completing the requirements for your most recent degree or diploma? 15

Yes (current job or type of work is different from my first work) ..... ☐ 1 (CONTINUE WITH QUESTION 29)

No (my current job is my first job) ..... ☐ 2 (GO TO QUESTION 33)

Currently not employed ☐ 3 (GO TO QUESTION 34a)

29. When did you start your current job? (PLEASE INDICATE BOTH YEAR AND MONTH) 16 17

Year.... 19 ☐☐ Month..... ☐☐

30a. Did you work full-time or part-time for this employer before starting, or during, your most recent degree or diploma program? 20

- Yes, as a regular employee ☐ 1
- Yes, as a co-op student ☐ 2
- Yes, in a field placement or internship ☐ 3
- Yes, in a summer job ☐ 4
- No ☐ 5
- Not applicable, self-employed ☐ 6

b. If YES, was that job about the same as your current job? 21

- Yes ☐ 1
- No ☐ 2

31. Now please describe the details of your current job according to the specifications outlined below. **(IT IS IMPORTANT TO BE AS DETAILED AS POSSIBLE)** 22-25

a) JOB TITLE (e.g. Civil Engineer, Editorial Assistant, Systems Analyst, Social Worker)

_____

b) What TYPE OF WORK do you do? What are your main duties? (e.g. Preparing Construction Plans, Editing Manuscripts, Designing Computer Systems, Client Counselling and Referral)

_____

_____

26-28 c) What kind of business, industry or service is this organization? (e.g. Building Construction, Magazine Publishing, Computer Software Rental and Sales, Regional Social Services). **(IT IS IMPORTANT TO BE AS DETAILED AS POSSIBLE)**

_____

_____

_____

d) FULL NAME OF ORGANIZATION? (If self-employed, please indicate)

_____

29 e) Is this a Crown Corporation?

- Yes ☐ 1
- No ☐ 2

30-31 f) CITY:

_____

32-33 g) PROVINCE/STATE:

_____

34-35 h) COUNTRY: (If outside Canada)

_____

i) EMPLOYMENT STATUS (with this organization) 36

- Full-time permanent (no specific termination date) ☐ 1
- Full-time temporary (contract, interim, summer job, etc.) ☐ 2
- Part-time (temporary or permanent) ☐ 3
- Self-employed ☐ 4

j) HOURS WORKED PER WEEK: 37

- Less than 25 hrs./week ☐ 1
- 25 - 29 hrs./week ☐ 2
- 30 - 35 hrs./week ☐ 3
- 36 - 40 hrs./week ☐ 4
- More than 40 hrs./week ☐ 5

32. What were the two most important reasons for changing employment? **(PLEASE INDICATE YOUR 1ST AND 2ND CHOICES PLACING THE APPROPRIATE NUMBERS IN THE BOXES BELOW.)** 38 41

01. Wanted a job in my field of study
02. Changed my career objectives/goals
03. Wanted to change location
04. Better salary
05. More appropriate for my career objectives
06. Better opportunity for advancement
07. Disliked/disillusioned with previous employment
08. More challenging/stimulating employment
09. To accompany spouse
10. Other **(PLEASE SPECIFY)** _____

_____

1ST MOST IMPORTANT REASON ☐

2ND MOST IMPORTANT REASON ☐

33. If currently employed, please indicate your approximate current salary. **(PLEASE CHECK ONE BOX ONLY)** 42 43

- Less than $10,000 per year ☐ 01
- $10,000 to $11,999 per year ☐ 02
- $12,000 to $13,999 per year ☐ 03
- $14,000 to $15,999 per year ☐ 04
- $16,000 to $17,999 per year ☐ 05
- $18,000 to $19,999 per year ☐ 06
- $20,000 to $21,999 per year ☐ 07
- $22,000 to $23,999 per year ☐ 08
- $24,000 to $25,999 per year ☐ 09
- $26,000 to $27,999 per year ☐ 10
- $28,000 to $29,999 per year ☐ 11
- $30,000 to $34,999 per year ☐ 12
- $35,000 to $39,999 per year ☐ 13
- $40,000 or more per year ☐ 14

34a. In terms of the type of job you were hoping to obtain upon completing the requirements for your most recent degree or diploma, how satisfied are (or were) you with your most recent job or position? (44)

- Very Satisfied ☐ 1
- Quite Satisfied ☐ 2
- Not Very Satisfied ☐ 3
- Not At All Satisfied ☐ 4

34b. Still thinking of your most recent job, how satisfied are (or were) you with the following? (PLEASE CHECK ONE BOX ONLY FOR EACH STATEMENT) (45-48)

	VERY SATISFIED	QUITE SATISFIED	NOT VERY SATISFIED	NOT AT ALL SATISFIED
1) salary	☐	☐	☐	☐
2) opportunity for advancement	☐	☐	☐	☐
3) opportunity for personal initiative	☐	☐	☐	☐
4) opportunity for experience and learning skills	☐	☐	☐	☐

35. How related is (or was) your most recent job to the field of study of your most recent degree or diploma? (PLEASE CHECK ONE BOX FOR EACH STATEMENT) (49-50)

	VERY RELATED	SOMEWHAT RELATED	NOT VERY RELATED	NOT AT ALL RELATED
a) In terms of program content and specific skills learned (e.g. lab techniques, translating, computer programming, design, etc.)	☐	☐	☐	☐
b) In terms of general skills learned (e.g. written communication, solving problems, thinking conceptually and analytically, etc.)	☐	☐	☐	☐

36. Which of the following characterizes the education requirements of your most recent job? (PLEASE CHECK ONE BOX ONLY, AND, IF APPLICABLE, NAME THE DEGREE OR DIPLOMA.) (51-57)

- a) A specific degree or diploma was required by my employer ☐ 1 — What degree or diploma was required? _____
- b) Any degree or diploma was required by my employer ☐ 2 — Please name any degree or diploma that was preferred over others _____
- c) A degree or diploma was desirable (but not required) by my employer ☐ 3 — Please name any degree or diploma that was preferred over others _____
- d) No degree or diploma was preferred or required by my employer ☐ 4
- e) I do not know if a degree or diploma was required by my employer ☐ 5

SECTION E

To be answered by all respondents

One area of concern regarding public education in Ontario is the availability of post-secondary education to all who desire it. The following questions on your parent(s) occupational and educational experience(s) will help the Ministry of Colleges and Universities address this issue.

37a. What was your father's main occupation in 1985? Please give a full description of his job title (i.e. inside postal clerk, secondary school teacher, chemical engineer, blast furnace operator, large appliance salesman, etc.) (58-61)

Main Occupation: _____

Or

- Not employed but looking for work ☐
- Retired from the labour force ☐
- Deceased ☐
- Other (PLEASE SPECIFY) _____ ☐
- Don't know ☐

→ GO TO QUESTION 38a

37b. What kind of business, industry or service was this? (Please give a full description: i.e. paper box manufacturing, retail shoe store, municipal government, etc.)
62-64

Industry: _____

38a. What was your mother's main occupation in 1985? Please give a full description of her job title (i.e. secondary school teacher, retail store cashier, lawyer, homemaker, etc.)
65-68

Main Occupation: _____

Or

- Not employed but looking for work ☐
- Retired from the labour force ☐
- Deceased ☐
- Other (PLEASE SPECIFY) _____ ☐
- Don't know ☐

GO TO QUESTION 39

38b. What kind of business, industry or service was this? (Please give a full description: i.e. Federal government, grocery store, automotive parts industry, etc.)
69-71

Industry: _____

39. Please indicate the highest level of education achieved for each of your parents (if applicable) by checking the appropriate box.
72-75

EDUCATION LEVEL OBTAINED	Father	Mother
No formal schooling (self taught)	☐ 01	☐ 01
Some elementary schooling	☐ 02	☐ 02
Completed elementary schooling	☐ 03	☐ 03
Some secondary schooling	☐ 04	☐ 04
Secondary school graduation certificate	☐ 05	☐ 05
Apprenticeship or Journeyman	☐ 06	☐ 06
Non-university certificate or diploma (e.g. College diploma, etc.)	☐ 07	☐ 07
Professional certificate or diploma (e.g. Nursing, Teaching, CPA, RIA)	☐ 08	☐ 08
Some university experience	☐ 09	☐ 09
Bachelors degree(s)	☐ 10	☐ 10
Degree in medicine, dentistry or veterinary medicine (M.D., D.D.S., or D.M.D. OR D.V.M.)	☐ 11	☐ 11
Master's degree(s)	☐ 12	☐ 12
Earned doctorate (e.g. PhD.)	☐ 13	☐ 13
Other (PLEASE SPECIFY) _____	☐ 14	☐ 14
Not applicable (don't know)	☐ 15	☐ 15

40. Finally one last question about your background. What is the language you first learned to speak?
76

- English ☐ 1
- French ☐ 2
- Other ☐ 3 (PLEASE SPECIFY) _____

THANK YOU.

Ministry of Colleges and Universities
9th Floor, Mowat Block, Queen's Park
Toronto, Ontario M7A 1L2

Etude sur les emplois occupés par les diplômés

DIRECTIVES

Veuillez lire attentivement les directives se rapportant à chaque question et cocher ☐ la case appropriée. Si aucune des réponses ne correspond à votre cas, inscrivez votre propre réponse à la suite de la question. Lorsqu'on vous demande de formuler une réponse, veuillez l'inscrire en lettres moulées pour qu'elle soit lisible. Suivez exactement les directives et ne répondez qu'aux questions qui s'appliquent à votre cas. Merci de votre collaboration.

SECTION A

Cette section doit être remplie par tous les répondants.

1. (9-11) Veuillez indiquer ci-bas:

a. Année de votre naissance ..... 19 ☐☐

b. Votre sexe ..... masculin ☐ 1

..... féminin ☐ 2

2a. (12-18) Quand, avant juin 1985, avez-vous terminé le programme préparant à votre grade ou diplôme le plus récent? **(INDIQUEZ L'ANNEE ET LE MOIS)**

Année ..... 19 ☐☐

Mois ..... ☐☐

b. (19-19) Quand avez-vous reçu ce grade ou diplôme, c'est-à-dire quand vous a-t-il été remis? **(INDIQUEZ L'ANNEE ET LE MOIS)**

Année ..... 19 ☐☐

Mois ..... ☐☐

3a. (20-21) Quel grade ou diplôme avez-vous reçu? **(NE COCHEZ QU'UNE SEULE CASE)**

Baccalauréat général - 3 ans	☐	01
Baccalauréat spécialisé - 4 ans (comprend le B.Ed. de 4 ans)	☐	02
B.Ed. (1 an seulement)	☐	03
M.D./D.D.S./L.L.B./L.L.L./O.D./ D.V.M./M.Div.	☐	04
Maîtrise (sauf M.Div.)	☐	05
Doctorat	☐	06
Diplôme/Certificat	☐	07
Autre (PRECISEZ)	☐	08

_____

3b. Quel établissement d'enseignement vous a décerné ce grade ou diplôme? **(INSCRIVEZ LE NOM EN ENTIER — ex.: Université de Windsor et NON U. de W.)**

_____

_____

4a. (22-29) Veuillez préciser le genre de grade ou diplôme que vous avez reçu (ex.: maîtrise en sciences appliquées, baccalauréat en éducation, baccalauréat en commerce). **(SOYEZ LE PLUS PRECIS POSSIBLE)**

GRADE/
DIPLOME _____

b. (24-29) Quel était votre principal domaine d'études? Soyez le plus précis possible (ex.: génie civil plutôt que simplement génie ou langues slaves plutôt que langues). Si vous aviez deux disciplines majeures, indiquez ces deux domaines d'études.

DOMAINE(S) 1. _____

D'ETUDES 2. _____

5a. (30) Etiez-vous inscrit à ... **(NE COCHEZ QU'UNE SEULE CASE)**

un programme ordinaire?	☐	1
un programme d'éducation coopérative?	☐	2
un programme ordinaire exigeant de l'expérience pratique ou un stage, ou bien les deux?	☐	3
autre? (PRECISEZ)	☐	4

_____

b. (31) Lorsque vous prépariez votre grade ou votre diplôme le plus récent, étiez-vous ... **(NE COCHEZ QU'UNE SEULE CASE)**

étudiant à temps plein seulement?	☐	1
les deux: étudiant à temps plein et étudiant à temps partiel ou du programme d'éducation permanente?	☐	2
étudiant à temps partiel ou du programme d'éducation permanente seulement?	☐	3
autre? (PRECISEZ)	☐	4

_____

c. (32) Avez-vous reçu d'autres grades ou diplômes d'études post-secondaires?

Non	☐	1
Oui	☐	2

(33-42) ENUMEREZ LES ET PRECISEZ L'ANNEE):

_____

_____

_____

6. 43-52 Pendant combien de temps avez-vous travaillé depuis la fin de vos études secondaires dans chacune des catégories d'emploi suivants? (EN MOIS)

a) Emplois d'été à temps plein (25 heures ou plus par semaine) ..... ANN. MOIS

b) Emplois à temps partiel y compris l'été (moins de 25 heures par semaine) ..... ANN. MOIS

c) Emplois à temps plein (exclure les emplois d'été) .... ANN. MOIS

d) Stage, programme coopératif ou internat ..... ANN. MOIS

7. 53 Etes-vous actuellement inscrit à temps plein ou à temps partiel à un cours ou un programme d'études post-secondaires (y compris un programme ou un cours préparant à un certificat professionel)?

Oui.. ☐ 1 **PASSEZ A LA SECTION B, QUESTION 8**

Non. ☐ 2 **PASSEZ A LA SECTION C, QUESTION 13**

SECTION B

Cette section doit être remplie uniquement par les personnes actuellement inscrites à temps plein ou partiel à un cours ou un programme d'études post-secondaires, un programme d'études post-doctorales ou un programme préparant à un certificat professionel.

8. 60-61 Parmi les cours ou programmes d'études post-secondaires suivants, quel est celui auquel vous êtes inscrit? (NE COCHEZ QU'UNE SEULE CASE)

Cours d'intérêt général (hors compte)	☐	01
Cours polytechnique	☐	02
Collège communautaire/ Ecole professionelle	☐	03
1er cycle (comprend l'année de rattrapage)	☐	04
Certificat professionnel (ex.: ca)	☐	05
Formation des enseignants	☐	06
M.D./D.D.S./L.L.B./L.L.L./O.D./D.V.M./ D.DIV.	☐	07
2e cycle (sauf M.DIV.)	☐	08
Etudes post-doctorales	☐	09
Autre (PRECISEZ)	☐	10

_____

9. 62 A quel type de programme êtes-vous actuellement inscrit?

programme ordinaire	☐	1
programme d'éducation coopérative	☐	2
un programme ordinaire exigeant de l'expérience pratique ou un stage, ou bien les deux?	☐	3
autre (PRECISEZ)	☐	4

_____

10. 63 Etes-vous actuellement inscrit ... (NE COCHEZ QU'UNE SEULE CASE)

à temps plein?	☐	1
à temps partiel/à un programme d'éducation permanente?	☐	2
à un cours par correspondance?	☐	3
autre (PRECISEZ)	☐	4

11a. 64-65 Veuillez indiquer, s'il y a lieu, à quel programme préparant à un grade, diplôme ou certificat vous êtes actuellement inscrit (par ex.: baccalauréat en éducation, maîtrise en sciences, doctorat, diplôme en administration des affaires). (SOYEZ LE PLUS PRECIS POSSIBLE)

GRADE/
DIPLOME/
CERTIFICAT: _____

b. 66-68 Quel est votre principal domaine d'études? Soyez le plus précis possible (par ex.: physique, corpusculaire, biologie moléculaire, journalisme, mécanique automobile).

DOMAINE D'ETUDES
OU COURS: _____

c. 69-70 Nom de l'établissement que vous fréquentez actuellement:

NOM COMPLET: _____

12. 71-74 Quelles sont les raisons qui ont le plus influencé votre décision de poursuivre vos études; (INDIQUEZ LES DEUX PLUS IMPORTANTES EN INSCRIVANT LE NUMERO CORRESPONDANT DANS LES CASES CI-DESSOUS).

1. L'emploi souhaité exigeait des études plus poussées
2. Je désirais étudier plus à fond un domaine précis
3. Je ne parvenais pas à trouver un emploi convenable
4. D'autres m'encourageaient à poursuivre mes études
5. Par intérêt général
6. Autre (PRECISEZ)

_____

1er RAISON ☐ 2e RAISON ☐

SECTION C

Cette section doit être remplie par tous les répondants.

13a. 75 Etes-vous actuellement . . . (NE COCHEZ QU'UNE SEULE CASE)

- employé à temps plein ..... ☐ 1 } PASSEZ A LA QUESTION 13b
- employé à temps partiel ..... ☐ 2 } PASSEZ A LA QUESTION 13b
- sans emploi mais vous attendez que l'emploi commence ou qu'on vous rappelle ..... ☐ 3 } PASSEZ A LA QUESTION 17
- sans emploi mais vous cherchez du travail ..... ☐ 4 } PASSEZ A LA QUESTION 17
- sans emploi et vous n'en cherchez pas ..... ☐ 5 } PASSEZ A LA QUESTION 14

13b. 76 Occupez-vous actuellement un emploi que vous avez déjà occupé avant ou pendant que vous suiviez le programme d'études (à l'exception des emplois d'été ou d'un travail dans le cadre de l'éducation coopérative)?

- Oui .... ☐ 1 (PASSEZ A LA QUESTION 23)
- Non ... ☐ 2 (PASSEZ A LA QUESTION 17)

14. 77-78 Quelle est la raison principale pour laquelle vous ne cherchez pas d'emploi? (COCHEZ UNE SEULE CASE)

- Poursuite de mes études ..... ☐ 01
- Voyages ..... ☐ 02
- Santé ..... ☐ 03
- Responsabilités de famille ..... ☐ 04
- Rareté des emplois ..... ☐ 05
- Autre (PRECISEZ)..... ☐ 06

_____

15. 79 Avez-vous cherché un emploi après avoir commencé le programme préparant à votre grade ou diplôme le plus récent?

- Oui .... ☐ 1 (PASSEZ A LA QUESTION 17)
- Non ... ☐ 2 (PASSEZ A LA QUESTION 16)

16. 80 Avez-vous travaillé après avoir terminé le programme préparant à votre grade ou votre diplôme le plus récent?

- Oui .... ☐ 1 (PASSEZ A LA QUESTION 23, SECTION D)
- Non ... ☐ 2 (PASSEZ A LA QUESTION 37, SECTION E)

17. Il existe bien des façons de s'y prendre pour chercher un emploi. Indiquez celles que vous avez utilisée en cochant les cases correspondantes: in 2 9 41

	1. Avez-vous utilisé cette méthode?	2. Dans l'affirmative, l'avez-vous trouvée efficace?	3. En est-il résulté une offre d'emploi?
a) Bureaux de placement privés	☐	☐	☐
b) Centre d'emploi du Canada hors du campus	☐	☐	☐
c) Bureau de placement ou d'orientation du campus .	☐	☐	☐
d) Annonces (journaux et autres)	☐	☐	☐
e) Amis ou parents ..	☐	☐	☐
f) Lettres ou appels téléphoniques à des employeurs ..	☐	☐	☐
g) Visites à des employeurs	☐	☐	☐
h) Professeurs ou facultés	☐	☐	☐
i) Anciens employeurs	☐	☐	☐
j) Employeurs où vous avez fait un stage	☐	☐	☐
k) Autre ..... (Ex.: vous avez ouvert votre cabinet ou travaillez à votre compte) (PRECISEZ)	☐	☐	☐

_____

18. 42 - 46 Pour chacune des activités suivantes, veuillez indiquez dans quelle mesure vous auriez eu besoin de plus d'aide pour chercher un emploi. (VOYEZ LE BAREME QUI SUIT CETTE QUESTION. INSCRIVEZ LE CHIFFRE QUI CORRESPOND A VOTRE RESPONSE)

	beaucoup plus d'aide	un peu plus d'aide	aucune aide supplémentaire	n'ai pas eu besoin d'aide
a) Orientation professionnelle	☐	☐	☐	☐
b) Preparation de curriculum vitae	☐	☐	☐	☐
c) Comportement durant les entrevues	☐	☐	☐	☐
d) Techniques de recherche d'emploi (où et comment découvrir les possibilités d'emploi)	☐	☐	☐	☐
e) Nom et addresse de compagnies où s'adresser	☐	☐	☐	☐

19. 47 - 50 Quand avez-vous commencé à chercher votre premier emploi après avoir terminé le programme préparant à votre grade ou diplôme le plus récent? (Si vous avez commencé à chercher un emploi avant la fin du programme, indiquez quand même la date où vous avez commence à chercher). (INDIQUEZ L'ANNEE ET LE MOIS)

Année ..... 19 ☐☐

Mois ..... ☐☐

20. 51 - 53 Environ combien de premiers contacts avec différents employeurs éventuels (que ce soit par téléphone, par correspondance ou en personne) avez-vous pris entre le moment où vous avez commencé à chercher un emploi et celui où vous avez accepté votre premier emploi? (Si vous n'avez pas travaillé depuis l'obtention de votre diplôme, veuillez inscrier le nombre total de contacts pris jusqu'à présent).

Nombre de contacts initiaux ..... ☐☐☐

21. 54 - 56 Combien d'entrevues ont résulté de ces contacts?

Nombre d'entrevues ..... ☐☐☐

22. 57 - 58 Combien d'offres d'emploi avez-vous reçues?

Nombre d'offres d'emploi ..... ☐☐

Si vous n'avez travaillé NI à temps plein NI à temps partiel, après avoir terminé le programme préparant à votre grade ou diplôme le plus récent, veuillez passer à la question 37, Section E.

SECTION D

Cette section doit être remplie UNIQUEMENT par les personnes qui ont actuellement un emploi, ou celles qui ont déjà eu au moins un emploi, à temps plein ou partiel, après avoir terminé le programme préparant à leur grade ou diplôme le plus récent. SI VOUS AVEZ OCCUPE PLUS D'UN EMPLOI A LA FOIS, VOS REPONSES DOIVENT SE RAPPORTER A CELUI QUI COMPTAIT LE PLUS D'HEURES DE TRAVAIL PAR SEMAINE.

23. 59 - 62 Quand a commencé (ou commencera) le premier emploi que vous avez obtenu après avoir terminé le programme préparant à votre grade ou diplôme le plus récent? (INDIQUEZ L'ANNE ET LE MOIS). Si vous l'avez obtenu ou avez commencé à travailler avant la fin de votre programme d'études, veuillez quand même indiquer la date où vous avez commencé.

Année ..... 19 ☐☐

Mois ..... ☐☐

24. 63 - 65 **Quels critères ont déterminé (ou détermineront) le choix de votre premier emploi? (Indiquez les deux plus importants en inscrivant les numéros correspondants dans les cases ci-dessous)**

1. Possibilité de travailler dans le domaine de mon choix
2. Possibilité de mettre en pratique mes capacités et mes aptitudes
3. Bon salaire
4. Possibilités d'avancement
5. Stabilité et sécurité
6. Possibilité d'aider les autres
7. Près de l'endroit où j'habite
8. Le seul emploi que j'ai pu trouver
9. Pour pouvoir accompagner ma femme (mon mari)
10. Pour acquérir une formation et de l'expérience
11. Autre (PRECISEZ) _____

_____

1er et principal critère ☐ 2e critère ☐

25. Veuillez décrire le premier emploi que vous avez occupé après avoir terminé le programme préparant à votre grade ou diplôme le plus récent, en fournissant les renseignements demandés ci-dessous. **(IL EST IMPORTANT D'ETRE LE PLUS PRECIS POSSIBLE)**

67 - 70

a) **TITRE DU POSTE** (ex.: analyste de systèmes, ingénieur civil, rédacteur adjoint, travailleur social)

_____

b) Quel **GENRE DE TRAVAIL** faites-vous, ou faisiez-vous? Quelle(s) est (sont) ou était(en)t votre (vos) fonction(s) principale(s)? (ex.: concevoir de systèmes informatiques, préparer des plans, reviser des manuscrits, conseiller et aiguiller des clients)

_____

71 - 73

c) **De quel genre d'entreprise, d'industrie ou de service s'agit-il? (ex.: location et vente de logiciels, construction d'immeubles, publication de revues, agence régionale de services sociaux). (IL EST IMPORTANT D'ETRE LE PLUS PRECIS POSSIBLE)**

_____

_____

_____

d) **NOM COMPLET DE L'ENTREPRISE:** (si vous êtes à votre compte, veuillez l'indiquer)

_____

e) **S'agit-il d'une SOCIETE DE LA COURONNE?**

Oui .... ☐ 1

Non ... ☐ 2

f) **VILLE:**

_____

77 - 78

g) **PROVINCE / ETAT:**

_____

79 - 80

h) **PAYS:** (si c'est à l'extérieur du Canada)

In 3

_____

9

i) **CATEGORIE D'EMPLOI** (chez est employeur):

Permanent à temps plein (ne prend pas fin à une date donnée)	☐	1
Temporaire à temps plein (contrat, intérim, emploi d'été, etc.)	☐	2
A temps partiel (permanent ou temporaire)	☐	3
A votre complet	☐	4

10

j) **NOMBRE D'HEURES DE TRAVAIL PAR SEMAINE:**

Moins de 25 h	☐	1
25 à 29 h	☐	2
30 à 35 h	☐	3
36 à 40 h	☐	4
Plus de 40 h	☐	5

26. Quel était votre salaire initial approximatif? (Si vous êtes à votre compte, indiquez vos gains annuels prévus). **(NE COCHEZ QU'UNE SEULE CASE)**

Moins de $10,000 par an	☐	01
$10,000 à $11,999 par an	☐	02
$12,000 à $13,999 par an	☐	03
$14,000 à $15,999 par an	☐	04
$16,000 à $17,999 par an	☐	05
$18,000 à $19,999 par an	☐	06
$20,000 à $21,999 par an	☐	07
$22,000 à $23,999 par an	☐	08
$24,000 à $25,999 par an	☐	09
$26,000 à $27,999 par an	☐	10
$28,000 à $29,999 par an	☐	11
$30,000 à $34,999 par an	☐	12
$35,000 à $39,999 par an	☐	13
$40,000 ou plus par an	☐	14

27a. Aviez-vous travaillé à temps plein pour cet employeur avant de commencer le programme préparant à votre grade ou diplôme le plus récent ou pendant le programme? 13

Oui, employé permanent	☐	1
Oui, dans le cadre de l'éducation coopérative	☐	2
Oui, en stage professionel ou internat	☐	3
Oui, en été	☐	4
Non	☐	5
Sans objet, à votre compte	☐	6

b. **Dans l'affirmative,** cet emploi était-il à peu près le même que le premier emploi que vous avez eu après avoir terminé le programme préparant à votre grade ou diplôme le plus récent? 14

Oui	☐	1
Non	☐	2

28. Avez-vous changé d'emploi (c'est-à-dire de genre de travail) depuis que vous avez terminé le programme préparant à votre grade ou diplôme le plus récent? 15

Oui (mon emploi actuel ou le genre de travail que je fais est différent de mon premier emploi ou du travail que je faisais)	☐	1	PASSEZ A LA QUESTION 29
Non (mon emploi actuel est mon premier emploi)	☐	2	PASSEZ A LA QUESTION 33
Actuellement sans emploi ...	☐	3	PASSEZ A LA QUESTION 34a

29. Depuis quand avez-vous votre emploi actuel? (INDIQUEZ L'ANNEE ET LE MOIS) 16 - 19

Année .... 19 [ ] Mois .... [ ]

30a. 20 Aviez-vous travaillé à temps plein chez cet employeur avant de commencer le programme prèparant à votre grade ou diplôme le plus récent ou pendant le programme?

- Oui, employé permanent ☐ 1
- Oui, dans le cadre de l'éducation coopérative ☐ 2
- Oui, en stage professionnel ou internat ☐ 3
- Oui, en été ☐ 4
- Non ☐ 5
- Sans objet, à votre compte ☐ 6

b. 21 Si, oui, votre emploi était-il le même que votre emploi actuel?

- Oui ☐ 1
- Non ☐ 2

31. 22-25 Veuillez décrire votre emploi actuel, en fournissant les renseignements demandés ci-dessous. (IL EST IMPORTANT D'ETRE LE PLUS PRECIS POSSIBLE)

a) TITRE DU POSTE (ex.: analyste de systèmes ingénieur civil, rédacteur adjoint, travailleur social)

_____

b) Quel GENRE DE TRAVAIL faites-vous? Quelles sont vos principales fonctions? (ex.: concevoir des systèmes informatiques, préparer des plans, réviser des manuscrits, conseiller et aiguiller des clients)

_____

_____

26-28 c) De quel genre d'entreprise, d'industrie ou de service s'agit-il? (ex.: location et vente de logiciels, construction d'immeubles, publication de revues, agence régionale de services sociaux.) (IL EST IMPORTANT D'ETRE LE PLUS PRECIS POSSIBLE)

_____

_____

_____

d) NOM COMPLET DE L'ENTREPRISE: (si vous êtes à votre compte, veuillez l'indiquer)

_____

29 e) S'agit-il d'une SOCIETE DE LA COURONNE?

- Oui ☐ 1
- Non ☐ 2

30-31 f) VILLE:

_____

32-33 g) PROVINCE / ETAT:

_____

34-35 h) PAYS: (si c'est à l'extérieur du Canada)

_____

i) CATEGORIE D'EMPLOI (chez est employeur): 36

- Permanent à temps plein (ne prend pas fin à une date donnée) ☐ 1
- Temporaire à temps plein (contrat, intérim, emploi d'été, etc.) ☐ 2
- A temps partiel (permanent ou temporaire) ☐ 3
- A votre compte ☐ 4

j) Nombre d'heures de travail par semaine: 37

- Moins de 25 h ☐ 1
- 25 à 29 h ☐ 2
- 30 à 35 h ☐ 3
- 36 à 40 h ☐ 4
- Plus de 40 h ☐ 5

32. Quelles étaient les principales raisons pour lesquelles vous avez changé d'emploi? (INDIQUEZ LES DEUX PLUS IMPORTANTES EN INSCRIVANT LE CHIFFRE CORRESPONDANT DANS LES CASES CI-DESSOUS.)

1. Souhaitais un emploi correspondant à mon domaine d'études
2. Envisageais une autre carrière
3. Souhaitais changer d'endroit
4. Meilleur salaire
5. Répondait mieux à mes ambitions professionnelles
6. Meilleures possibilités d'avancement
7. Ancien emploi me déplaisait / m'a déçu
8. Travail plus enrichissant / stimulant
9. Pour accompagner ma femme (mon mari)
10. Autre (PRECISEZ) _____

_____

1er et principale raison ☐ 2e raison ☐

33. Si vous avez un emploi actuellement, veuillez indiquer votre salaire actuel approximatif. (NE COCHEZ QU'UNE SEULE CASE)

- Moins de $10,000 par an ☐ 01
- $10,000 à $11,999 par an ☐ 02
- $12,000 à $13,999 par an ☐ 03
- $14,000 à $15,999 par an ☐ 04
- $16,000 à $17,999 par an ☐ 05
- $18,000 à $19,999 par an ☐ 06
- $20,000 à $21,999 par an ☐ 07
- $22,000 à $23,999 par an ☐ 08
- $24,000 à $25,999 par an ☐ 09
- $26,000 à $27,999 par an ☐ 10
- $28,000 à $29,999 par an ☐ 11
- $30,000 à $34,999 par an ☐ 12
- $35,000 à $39,999 par an ☐ 13
- $40,000 ou plus par an ☐ 14

34a. Etes-vous (ou étiez-vous) satisfait de votre emploi le plus récent dans la mesure où il correspondait à l'emploi que vous espériez trouver après avoir terminé le programme préparant à votre grade ou diplôme le plus récent?
44

- très satisfait ☐ 1
- satisfait ☐ 2
- pas très satisfait ☐ 3
- pas du tout satisfait ☐ 4

34b. Toujours en ce qui concerne votre emploi le plus récent, dans quelle mesure êtes-vous (ou étiez-vous) satisfait? **(NE COCHEZ QU'UNE SEULE CASE PAR RUBRIQUE)**
45-48

	TRES SATISFAIT	SATISFAIT	PAS TRES SATISFAIT	PAS DU TOUT SATISFAIT
1) du salaire	☐	☐	☐	☐
2) des possibilités d'avancement	☐	☐	☐	☐
3) des possibilités de prendre des initiatives	☐	☐	☐	☐
4) des possibilités d'acquérir une formation et de l'expérience	☐	☐	☐	☐

35. Votre emploi le plus récent se rapporte-t-il (ou se rapportait-il) aux études que vous avez faites en vue d'obtenir votre grade ou votre diplôme le plus récent? **(COCHEZ UNE SEULE CASE PAR RUBRIQUE)**
49-50

	TOUT A FAIT	UN PEU	TRES PEU	PAS DU TOUT
a) sur le plan du contenu du programme et des techniques apprises (par exemple techniques de laboratoire, traduction, programmation d'ordinateur, conception, etc.)	☐	☐	☐	☐
b) sur le plan des compétences d'ordre général (par exemple rédaction, solution, de problèmes, conceptualisation et analyse, etc.)	☐	☐	☐	☐

36. Laquelle des rubriques suivantes correspond aux exigences de votre employeur le plus récent en ce qui concerne les études? **(COCHEZ UNE SEULE CASE ET, S'IL Y A LIEU, INDIQUEZ LE TITRE DU GRADE OU DU DIPLOME EXIGE.)**
51-57

- a) Mon employeur exigeait un grade ou un diplôme précis ☐ 1 — Quel grade ou diplôme était exigé? _____
- b) Mon employeur exigeait n'importe quel grade ou diplôme ☐ 2 — Quel grade ou diplôme préférait-on _____
- c) Il était souhaitable d'avoir un grade ou un diplôme mais mon employeur ne l'exigeait pas ☐ 3 — Quel grade ou diplôme préférait-on _____
- d) Mon employeur ne préférait ni n'exigeait aucun grade ni diplôme ☐ 4
- e) Je ne sais pas si mon employeur exigeait un grade ou un diplôme ☐ 5

SECTION E

Cette section doit être remplie par tous les répondants

L'une des préoccupations et Ontario, en ce qui concerne l'éducation publique, est l'accessibilité de l'éducation post-secondaire à tous ceux qui désirent poursuivre leurs études. Vos réponses aux questions qui suivent sur l'education et les emplois de vos parents permettront au ministère des Collèges et Universités de répondre à cette préoccupation.

37a. Quel était le principal emploi de votre père en 1985? Veuillez donner le titre complet de son poste, ex.: commis au courrier interne, enseignant d'école secondaire, ingénieur chimiste, conducteur de haut fourneau, vendeur de gros appareils ménagers, etc.
58-61

Le principal emploi: _____

OU

- Sans emploi, mais cherchait du travail ☐ 1
- A la retraite ☐ 2
- Décédé ☐ 3
- Autre (PRECISEZ) _____ ☐ 4
- Ne sais pas ☐ 5

} PASSEZ A LA QUESTION 38a

37b. 62-64 Dans quel genre d'entreprise, d'industrie ou de service occupait-il cet emploi? (Veuillez en donner une description complète, ex.: manufacture de boîte en papier, magasin de chaussures au détail, administration municipale, etc.)

L'industrie: _____

38a. 65-68 Quel était le principal emploi de votre mère in 1985? (Veuillex donner le titre complet de son poste, ex.: enseignante d'école secondaire, caissière dans un magasin de vente au détail, avocate, ménagère, etc.)

Le principal emploi: _____

OU

Sans emploi, mais cherchait du travail	☐ 1	PASSEZ A LA QUESTION 39
A la retraite	☐ 2	
Décédée	☐ 3	
Autre (PRECISEZ) _____	☐ 4	
Ne sais pas	☐ 5	

38b. 69-71 Dans quel genre d'entreprise, d'industrie ou de service occupait-elle cet emploi? (Veuillez en donner une description complète, ex.: gouvernement fédéral, épicerie, industrie des pièces d'automobile, etc.)

L'industrie: _____

39. 72-75 Indiquez le niveau d'instruction de vos père et (ou) mère en cochant la case appropriée.

NIVEAU D'INSTRUCTION	père	mère
Aucune scolarité (autodidacte)	☐ 01	☐ 01
Quelques années d'école élémentaire	☐ 02	☐ 02
Ecole élémentaire complétée	☐ 03	☐ 03
Quelques années d'études secondaires	☐ 04	☐ 04
Diplôme d'études secondaires	☐ 05	☐ 05
Certificat d'apprentissage ou de qualification dans un métier	☐ 06	☐ 06
D'autres cours, certificat ou diplôme non universitaire	☐ 07	☐ 07
Diplôme de formation professionnelle (ex.: infirmier, enseignant, expert-comptable, comptable industriel agréé)	☐ 08	☐ 08
Quelques études universitaires	☐ 09	☐ 09
Diplôme universitaire du premier cycle	☐ 10	☐ 10
Diplôme de médecine, dentisterie ou sciences vétérinaires (M.D., D.D.S. ou D.M.D. ou D.V.M.)	☐ 11	☐ 11
Maîtrise(s)	☐ 12	☐ 12
Coctorat (ex.: PhD.)	☐ 13	☐ 13
Autre (PRECISEZ) _____	☐ 14	☐ 14
Sans objet (je ne sais pas)	☐ 15	☐ 15

40. 76 En dernier lieu, quelle est votre langue maternelle?

Anglais .... ☐ 1

Français ... ☐ 2

Autre ..... ☐ 3 (PRECISEZ) _____

MERCI

Ministère des Collèges et Universities
9 étage, Edifice Mowat, Queens Park
Toronto, (Ontario) M7A 1L2

A-3 Liaison

Throughout the period in which the 1985 survey was carried out, continuous communication was maintained between the contractor and the ministry (see A.1). As part of this, meetings were held between the contractor and ministry officials and the contractor provided the ministry with regular written and verbal progress reports, including updates on response rates. These contacts not only served to keep both parties informed of one another's plans and activities, but also permitted potential problems to be identified early and remedial action to be taken.

Likewise, the contractor and ministry officials met with interested officers of the several institutions involved during the fieldwork stage of the study to inform them of the progress of the project and discuss the coding and editing of the data. In addition, close contact was kept with those institutions which elected to carry out their own mailing, to ensure that a standard procedure was used.

A-4 Study Population

The study population for the survey was the spring 1985 graduates of the fifteen Ontario universities, the Ontario College of Art, and Ryerson Polytechnical Institute. Visa students were not included. Each spring graduate was sent a questionnaire. The data obtained, then, describe the entire population and not just a sample. For this reason, no tests of statistical significance needed to be performed nor confidence intervals estimated.

A-5 Questionnaire Finalization

The researchers worked closely with ministry officials to finalize the questionnaire. Since a few items had been added to the questionnaire used previously it was necessary to reformat parts of the instrument in preparation for typesetting. The 1985 version of the questionnaire included new questions on mothers' and fathers' main occupation and industry of employment in 1985, the language first spoken and the name of the institution from which they received their degree or diploma. Also, based on the results of the previous survey, a number of coding categories and skip instructions were added to several questions in the questionnaire.

The questionnaire was available in English and French. The ministry was responsible for translation of the document. The contractor was responsible for finalizing the format.

A-6 Mailing Procedure

As the first step in the mailing procedure, each institution participating in the centralized mailing was requested to provide a list of its 1985 spring, non-visa graduates, including sequential identification numbers. In order to maximize efficiency and accuracy, a computerized record-keeping system was used to generate mailing lists, monitor daily returns, and determine response rates on a regular basis. So, as each list was received, the names were entered into a computer file, and the following information retained: the graduate's name and current address and an identification number unique to both the institution and the individual.

Since the mailing lists provided to our firm by the universities came in a variety of forms (i.e., computer tapes, diskettes, labels, lists) it was necessary that they be converted to a standard format to facilitate the production of mailing labels and the computer monitoring of returns. This involved computerizing the tapes, diskettes, lists or labels. The computerized mailing lists were then standardized using a Fortran conversion and editing routine. The Fortran conversion step basically involved the change of the width and order of the address fields to a rough standard, while the editing step was used to adjust field widths, delete visa students, insert missing postal codes, separate French and English lists, sequentially number respondents, and generally correct such things as truncated fields and spelling errors.

Once the lists were standardized, labels for each graduate were generated. The unique identification numbers were preprinted onto the return envelopes, with names and numbers being matched prior to each mailing as questionnaires and return envelopes were stuffed into outgoing envelopes. This procedure made it possible to determine at each stage of the mailing who had responded and who had not.

Those institutions who carried out their own mailing were expected to keep their own records of returns. They were, however, briefed in detail on the mailing procedure used by the contractor so that any differences between them might be minimized. The contractor monitored the mailing procedure at these institutions on a weekly basis.

As each returned questionnaire was received, the identification number on the return envelope was transferred to the completed questionnaire and a second computer file was set up. This file included the respondent's identification number and the date when the returned questionnaire was received.

The mailing was spread over a period of approximately three months. The mailing of the first set of questionnaires by our firm began April 18 and took about two weeks. When the overall response rate exceeded 30%, the mailing of reminder cards began (May 27) and took about a week. As individual university

response rates, or the overall rate, exceeded 40% (which ever came first), the final mailing of reminder letter and second questionnaire began (June 17). Of the four universities that were handling their own mailing, Wilfrid Laurier and Waterloo maintained a schedule similar to ours while Lakehead and Toronto began their mailing somewhat later.

Non-respondents were identified by matching the total population computer file with the file of respondents, using a program designed specifically for that purpose. Once again, address labels were generated and affixed to reminder cards. The same procedure was used to keep a record of all returns following the second mailing, and to produce the address labels for the third mailing.

Non-deliverable respondent names were returned to the universities for tracing and a separate mailing was conducted for this group using the updated addresses.

Two institutions had considerably lower adjusted rates of return than others. In order to increase the response rates for these, telephone interviews were carried out. Interviewers were instructed to use the exact wording of questions from the mail questionnaire.

A-7 Response Rates

The overall and individual response rates for universities are reported in Table 1.1. To summarize: as of the 26th of September, we had received: 19144 completed questionnaires and 2532 non-deliverables, yielding an unadjusted response rate of 52.7 per cent and an adjusted response rate of 56.9 per cent. The adjusted response rate was calculated by dividing the sum of completed and others by the total graduates minus the non-deliverables.

A-8 Response Bias

Considerable effort was made in the 1982 Graduate Survey to check for various sorts of response bias including institution, gender, field of study and level of degree. For example, were females more likely to respond than males; were graduates from some institutions more likely to respond than graduates from other institutions? No serious bias was found. In the 1985 survey, a few selected bias checks were performed (depending on the availability of comparable data) and, once again, no serious response biases were found. Females have a slightly higher tendency to respond to the survey than do males.

A-9 Coding

After each returned questionnaire had been entered into the return file, it was filed by institution for coding. A number of the returned questionnaires were not coded since they were classified as ineligibles, refusals or other (see Table 1.2). A detailed manual which included instructions on how to code each question was prepared for the coders.

Since most of the questions in the questionnaire are closed-ended and precoded on the instrument itself, the bulk of the coding involved only the transfer of the code beside the respondent's answer to the margin of the document. In some instances, however, the questions were open-ended, so that the coders had to refer to the coding manual for the correct code for any particular answer. In general, the response categories used for these open-ended questions were determined from the answers given to the same or similar questions on other surveys, including the 1982 Graduate Employment Survey, although new categories were added when the frequency of respondents' answers suggested their necessity or utility. The University Students Information System (USIS) was used to code field of study. Canadian Classification and Dictionary of Occupation (CCDO) codes were used; in coding industry, 3-digit Standard Industrial Classification (SIC) codes were employed. While the CCDO and SIC manuals (and their updates) were sufficient to cover most cases,

the coders also had access to the Scott's Directory of Ontario Industries and the Canadian Key Businesses Directory to assist them in ambiguous cases. In addition, it was necessary to develop a number of special codes to cover areas or work and industries not well defined in the CCDO or SIC; and special procedures were used to deal with respondents' answers which were especially vague. For example, special codes covered various different types of research assistants, as well as supply teachers and postdoctoral fellows.

All coders were specially trained for this project. As well, two supervisors were present at all times during the coding and, during the first few weeks, a supervisor checked the coding of virtually every questionnaire so that any particular problem area might be detected. Regular supervisory checking continued throughout the entire coding phase, and coders were encouraged to set aside problem questionnaires so that the supervisors might code them themselves. Finally, in order to increase accuracy, all coding was done separately for each institution, so that the coders became familiar with those codes which were fairly well represented for some institutions but not for others.

To make the data comparable to 1982 (which was sent out 1-2 months earlier), 1985 graduates who returned to school in 1986 were coded as students and the appropriate adjustments were made throughout the questionnaire.

After the coder training had taken place and the first 500 questionnaires had been coded, a meeting was held with representatives of the ministry, the Council of Universities and eight universities to present a brief progress report and to discuss the initial coding. Each representative was given a sample of coded questionnaires completed by the university's graduates to examine in terms of overall coding and specifically the coding of occupation and industry. Approximately 500 coded questionnaires were examined. In general, the quality of the coding was thought to be very good with a few university-specific suggestions for improvements. A new occupation code was created: 3150 - medical research assistants. University-specific problems in the coding of field of study and occupation were also discussed. Arrangements were made for the universities to have non-deliverables traced and for future liaison should additional university-specific problems occur.

A-10 Data Entry, Editing, and Analysis

Once the data were coded, they were entered directly into a computer file by data entry clerks. These clerks were trained to identify any obvious errors which might have been missed during the coding phase of the project and instructed to alert their supervisors to such errors so that they might be corrected. In addition, special tabs were used in the data entry format so that lines which were either too short or too long could easily be spotted on the video display screen.

As the data file for each institution was completed, the special data editing procedures were implemented. First, using a computer program written for the purpose, the entries for each respondent were checked to make certain that they contained the correct number of records, i.e., to ensure that the data were complete in each case. Any errors located in this process were then corrected. Second, the data were checked for out-of-range and inconsistent responses, again using a computer program written for the purpose. Out-of-range responses were those in which there was no response category for a particular question, which corresponded to the code that was entered. Inconsistent responses were those that appeared to conflict with responses to certain other questions.

Out-of-range responses were relatively straightforward to identify and correct. Inconsistent responses, however, were not always so obvious, and may not even have represented errors as such. In one case, a respondent may have followed an unexpected skip pattern in the questionnaire. In another case, a series of chronological dates were not in the expected order. In both cases, however, what may at first have appeared to be a personnel error may have turned out on closer inspection to be the result of one or more questions which did not relate very well to the unusual circumstances of a particular respondent's life. In "inconsistencies" of this kind, it is best not to "correct" the data, but rather to document their occurrence in the coding manual or elsewhere. Inconsistencies which were the result of

coding errors and clear respondent confusion as to appropriate skip patterns, however, were corrected.

After the data were edited using the procedures outlined above, a set of frequencies was produced to verify that the necessary corrections had actually been made. A fully documented SPSS system file was set up, and the data merged to form a single data set of respondents from all 17 institutions. No analysis was conducted using the separate files from the individual institutions.

A-11 Weighting the Data

In sample surveys where different subpopulations have different sampling fractions, it is common to weight the subsamples so as to correct for their relative over- or under-representation. By analogy, in surveys where the extent of a response bias is known, it is not uncommon to weight the data in order to compensate for it. In both cases, the assumptions are that the separate subsamples are randomly selected from their respective populations, and that statistics calculated on the unweighted data are biased estimates of their corresponding population parameters.

Since the data are from a population, not a sample, no tests of statistical significance were conducted. However, the decision was made to weight the data to adjust for the differential rates of response across institutions. At the same

time, it should be noted that weighting the data in this way was shown to have very little effect. Many comparisons were run between the unweighted and weighted data, and the differences found were inconsequential.